

A Commons Perspective on Urban Informal Settlements:

A Study of Kalyanpur slum in Dhaka, Bangladesh

By

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S M Waliuzzaman, 2020

STATEMENT OF AUTHENTICATION

I certify that the work in this thesis has not been previously submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that this thesis has been written by me. Any help that I have received in my research and the preparation of this draft itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

ABBREVIATIONS USED

CBO	Community Based Organisation
CBD	Central Business District
CEC	Community Economies Collective
CPR	Common Pool Resource
FGD	Focus Group Discussion
FYP	Five Year Plan
GoB	Government of Bangladesh
HBRI	House Building Research Institute
NGO	Non-Government Organisation
RAJUK	Rajdhani Unnayan Kartripakkha

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Abstract

This research aims to reimagine urban informal settlements beyond the existing hegemonic understanding of slums, currently imagined through the tropes of ‘dysfunction’ and ‘disorder’. Contemporary writing about slums mostly highlight the material aspects of slums and the ‘poor’ living conditions of the slum dwellers, which have contributed further to their discursive marginalisation instead of improving the living situations of millions of people living in them worldwide. The conceptualisation of slums in this hegemonic line of thinking is influenced by the colonial legacy of viewing informality as the ‘problem’ of Global South cities. Planning and policy interventions aimed at improving the living conditions of slum dwellers are focused on housing and shelter, as if slums emerge to serve only the sole residential purpose of the slum dwellers. In this context, I adopt the concept of ‘commons’ in this research to bring a new perspective in the conceptualisation of slums. I take a case study slum, known as Kalyanpur slum, in Dhaka, Bangladesh and apply a commons framework. By exploring how the socio-spatial aspects of commoning are expressed by the slum dwellers through the negotiation of access, use, benefit, care and responsibility about the slum, I intend to dismantle some of the presumptions about urban informal settlements.

The results suggest that a purely housing and shelter-based understanding of slums is not adequate to capture the dynamism of such unique settlements. The slum is not just a readily found ‘physical resource’, subject only to the consumption of the slum dwellers, but constructed through the active, careful and strategic actions of the slum dwellers. The slum community is not a homogenous group of ‘poor’ people who lack what it takes to be socio-economically productive but a heterogeneous group of commoners who come together to transform a piece of land into a functional living space. What limits the ability of these commoners to improve their living conditions is not the lack of material resources but an enabling environment in which their commoning practices can thrive. The dilemma around the legality of slums hinders the socio-economic wellbeing of the slum dwellers making the slum space highly contested. However, a commons analysis also sheds light on the legal dilemma around slums arguing that an ownership-based understanding of property is not adequate when it comes to conceptualising a commons such as Kalyanpur slum. Ownership is important, but not necessarily a pre-requisite for a commons to operate. Instead, authorities and

urban professionals can contribute to creating the necessary enabling environment for the commoners by recognising commons as a form of property that emerges from the locally-grounded property relations. The socio-spatial analysis offered in this research can help urban professionals in their efforts to understand these locally-evolved property relations and put in place necessary services that would improve the living condition of the slum dwellers instead of intensifying the marginalisation and inequality.

Therefore, this research demonstrates through the case study of Kalyanpur slum that a commons perspective on urban informal settlements can bring new insights about complex urban settings such as slums. These insights not only help us to reimagine slums beyond the narrow and simplistic conceptualisation of informal settlements, but also contribute to evolving theories of urban commons. Kalyanpur slum is a commons that is different from many other natural resource commons or urban commons in how its socio-spatialities are manifested. By combining a social and spatial approach, this research also contributes to the methodological aspects of commons analysis. Therefore, this research actively contributes to the production of knowledge about informal settlements and urban commons.

Preface

Before diving into the research, I would like to highlight two important moments that have influenced the adaptation of a socio-spatial approach in this research. I have undertaken a commons perspective to investigate the social elements of the people living in informal settlements. This choice of a commons perspective was possibly predestined if not predetermined. I first came across the concept of commons in 2012, almost four years before starting my PhD. At that time, I was working with ActionAid; an international NGO working to eradicate poverty and injustice across the globe. While developing evidence-based policy advocacy tools for trans-boundary water sharing process among the countries of South Asia (i.e. Bangladesh, India, Nepal and Pakistan), my very encounter with the concept of commons transformed the way I think about natural resources. Especially the role of boundary (i.e. National boundaries) in the use and abuse of natural resources. The adaptation of a very territorialised (and often commercialised) perception and policy on trans-boundary rivers flowing across these countries have been impacting so many people whose lives revolve around these rivers on a daily basis. Listening to the stories of the people from both sides of the border I was able to see how similar their struggles were in exercising their rights to the river. What these local communities were traditionally practising was driven by the value of sharing water and caring for each other, has been brought into conflict by a territorialised perception of river and its water by the nation-states. Instead, ActionAid was interested in advocating for what these local people were already practising under the broader term of ‘Water Commons’ in which these nation-states would come together to develop more of a commons perspective to rivers beyond national boundaries. A shared and regional level river basin management policy is what ActionAid was advocating for across these countries.

Little did I know that my involvement in this initiative would help me down the line to see value in commons approach to be applied in a very different context; urban informal settlements. Being a student of planning, it was quite an easy decision for me to choose informal settlements as my PhD topic. Given my extensive exposure with the marginalised community in Bangladesh through my work with ActionAid, I decided to take a critical view on my own discipline; planning, by bringing slum and its people into the focus of my research investigation. Therefore, at the beginning of my PhD journey in late 2016, I was desperately searching for a fresh perspective to

bring into the discussion of informalities of the Global south. I was quick to grasp the idea of commons again at this point when my supervisor encouraged me to read *Diverse Economies* by Gibson-Graham and other related works of the Community Economies scholars. Being a part of the PhD reading group that she formed, I was able to comprehend various social theories that challenge the stigma. Hence begin my journey towards enlightenment by deeply engaging with the very fundamentals of commons and its potential implications in the investigation of informal settlements.

Another point of this research is the adaptation of spatial approach. Unlike commons, I was clear from the very beginning that whatever direction I end up heading in my PhD journey, a spatial element would be an integral part of it. This mind-set was possibly derived from my planning background and natural inclination towards spatial analysis. Therefore, every now and then I would pop-in to my supervisor's office and discuss various spatial analysis techniques that I was planning to adopt as part of my analysis. However, the first question that my supervisors would ask was 'Why?'. Though I was caught by surprise with this question at the beginning but was quick enough to understand the vital importance of this simple question. I realised that it doesn't make any sense to use a particular tool/technique just because the researcher is good at it and unless there is a pressing need for that tool/technique to be applied in the context of the research. This question posed by my supervisors forced me to reorient my thinking of the research problem that I was about to address. They also offered me readings in the field of critical and qualitative GIS which eventually shaped my research in a productive way. It is through these readings and intense discussions with my supervisors that I was able to see the agentic role that could potentially be played by space in the functioning of urban informal settlements, going beyond the traditional views of space functioning as an objective background of the informal activities.

Therefore, the research that has emerged out of these two important moments of my PhD journey is methodologically unique in the way it combines the social with the spatial. I had to theoretically understand the constructive nature of socio-spatial and then methodologically come up with a solution to combine these two with each other. I have managed to do this by adopting a mixed-method approach, by supplementing commons with Space Syntax method, by mapping the social with the spatial, by triangulating respondent's experience of spaces with GPS tracking and then

validating with my own. This has been quite a learning curve for me. Most important for me is this journey through which I have evolved as a researcher in the last few years. This unique experience will remain with me for the rest of my life and I hope this experience would be useful for my further investigation in other fields of knowledge.

Chapter 1 : Introduction

1.1 Introduction

This research is about urban informal settlements, a distinctive characteristic of urbanization in the countries of the Global South. The rapid urbanisation in these countries is associated with the massive growth of informal settlements also known by slums, squatters, shacks, ghettos, irregular settlements, favelas, and various other names. Urbanization and slum formation are often seen as synonymous in these countries where informal development is the norm rather than the exception (UN-HABITAT, 2008). Though urbanization in general is seen as the driving force of our civilization and prosperity, in the Global South context, slums are understood to have emerged as a result of unmanaged urbanization where people are trapped into the vicious cycle of poverty (Swapan, Zaman, Ahsan, & Ahmed, 2017). Therefore, slums are seen as the symbol of poverty and backwardness in the cities of the Global South countries (Rana, 2011). Many urban scholars however believe that such line of thinking about urban informal settlements is influenced by the Western understanding of cities and not necessarily depicts the ground level complexities associated with slum like settlements (Arabindoo, 2011; A. Roy, 2011; Varley, 2013) . In this research I therefore critically examine our understanding of slums which as Roy (2011) argued, is important to ensure an inclusive and sustainable urban development practices in the Global South countries.

An estimated one-third of the world's urban population lives in slums (UN-HABITAT, 2006). The most well-known characteristics of slums and other informal settlements are insecure land tenure, high-density self-built housing, low level of infrastructure and basic services, and residents with low income. Slums are also known for having high rate of disease and mortality in contrast to other urban areas. Lack of access to health care and other urban services is a major problem for slum dwellers. These characteristics suggest an image of a slum that is 'a dysfunctional space' where inequalities are not only tolerated but allowed to fester (UN-HABITAT, 2006). For example, Cities Alliance (2006) describes slums as 'neglected parts of cities where housing and living conditions are appallingly poor'. Patel and Stough (2012) have warned against the threat posed to sustainable urban development by the growth and expansion of slums in developing countries. Literature

regarding slums is full of narratives asserting that the world will soon be infested with slums; places of poverty, disease, and disgrace (Gilbert, 2007).

Negative portrayals and stigmatisation of slums and their residents have led to the discursive marginalisation of urban informal settlements and have been used to justify actions by various groups with negative outcomes against the interests of those living in the slums. The most visible implication of such discursive marginalisation is the increased number of slum eviction, clearance, and relocation initiatives in many developing countries. For example, after reviewing interventions by government and non-governmental organisations, Mohit (2012) identified eviction, resettlement through sites-and-services schemes, slum upgrading programmes, and the Back to Village (Ghore Phera) Programme as the major types of interventions carried out in the slums of Dhaka. His careful investigation suggests that many of these interventions were coloured by a tendency to blame slum dwellers for being poor and treating slums and slum dwellers as something disgraceful and incongruous. The World Bank (2007) reported 135 instances of slum eviction in Dhaka city between 1975 and 2004. In 2012 there was a major slum eviction campaign resulting in 2,000 structures being demolished to reclaim 170 acres of public land (Mohit, 2012).

A similar tendency is also evident in other countries of Africa, Asia, and Latin America. In Nigeria, massive evictions of slum and squatters occurred in 2006 (Amnesty International, 2017; Huchzermeyer, 2007). Operation Murambatsvina in Zimbabwe resulted in around 70,000 people losing their homes and livelihoods in 2005 (Potts, 2006). In India, slum evictions are a regular occurrence driven by speculation and market forces (Arabindoo, 2011). In China, economic growth has led to increased land values resulting in some of the most violent slum evictions in history (Lombard, 2014). In Latin America, nearly 150,000 people were evicted from slums in 15 countries from 2004 to 2006 (Hernández & Kellett, 2010). In cases where direct eviction does not occur, marginalisation can still be reinforced spatially and socially by, for instance, building walls around the settlement, restricting access to public spaces, and so on. Similar evidence from around the world suggests the destructive effect of this discursive and material marginalisation. Urban planning in many of these cases has contributed to these damaging effects and exacerbated urban poverty in countries of the Global South by raising the cost of informality and shifting it spatially (Watson, 2009).

In this context, I pursue this research to reimagine urban informal settlements beyond the hegemonic understanding. I am particularly concerned about our flawed understanding of urban informal settlements because it hinders our ability to see the ground-level realities of urban informal settlements and therefore restricts our possibilities for innovative solutions. It is not surprising to me that the prominent depictions of slums have tended to conceptualise them in overriding negative terms, given the inequalities and injustices that occur in slums on a daily basis. There is hardly any doubt regarding the massive inequalities and socio-economic deprivation experienced by people living in slums. Many accounts from various disciplinary standpoints have framed the problems of slums so as to make a pressing case for action, especially after the UN's 1999 Cities Without Slums campaign¹ and its documentation of its findings in its report *The Challenge of Slums* (UN-HABITAT, 2003).

However, like Gilbert (2007) I doubt that this portrayal of slums does not necessarily work in favour of the marginalised people living in them, and instead more often intensifies their problems by justifying evictions and clearance. Despite many advances that have been made in the theoretical and practical aspects related to slums, the destructive effects of stigmatisation, discrimination, eviction, and displacement are still felt by millions of urban dwellers. The negative notions associated around slums have helped to generate a homogeneous image of the slum as a space of squalor (Mahabir, Crooks, Croitoru, & Agouris, 2016) where slums are perceived as nothing more than a manifestation of poor housing standards that fail to ensure basic services and human rights. Therefore, the proliferation of slums in Global South cities are then thought of as the physical and spatial manifestation of urban poverty (UN-HABITAT, 2003). However, Gilbert (2007) has warned us that such a negative universal portrayal of slums can significantly obscure the diversity and complexity associated with informal settlements, a point that has been further explored in this research through empirical evidences.

Along this journey of re-imagining slums from a grounded level, this research is also informed by the idea foregrounded by prominent postcolonial scholars such as Robinson (2006, 2011) and Roy (2009, 2011) who expressed their concern over the simplified and homogenous rhetoric around

¹ A detailed description of the initiative can be found at: <http://www.citiesalliance.org/activities-output/topics/slum-upgrading/action-plan.html>

slums and have argued that it is a flawed conceptual framework that has led to the perception of slums as places of filth and sewage. They have argued that destructive approaches to slums are reflections of the critical gap in urban theories that contribute to the marginalisation of urban informal settlements. Contemporary urban theories are dominated by a particular ontological understanding of informality that is influenced by apocalyptic and dystopian narratives of the slum (A. Roy, 2011). These scholars are particularly focused on the failure of western and modernist urban theories that consider the ‘informality’ of Global South cities as backwardness, underdevelopment, and struggles, and hold similar perception and analysis towards informal as they hold towards Victorian slums or American ghettos. Instead, Roy and AlSayyad (2004) have argued that the informality exhibited in the cities of the Global South needs to be understood as a way of life. Their careful investigation of urban spaces in cities around the Middle East, Latin America, and South Asia highlight the predominant ignorance in contemporary urban theories about the productive spaces of informality that constitute the twenty-first-century urban landscape.

In this research, I take Dhaka in Bangladesh, as my study area to re-examine our preconceptions regarding urban informal settlements. The idea is that how we approach a particular concept is mainly guided by how we understand or define that ‘concept’ in the first place. If our understanding of a concept is flawed then it is likely that our measure to address that concept would be problematic. The reason why slum evictions, clearance and/or slum relocations are so popular among the policymakers is this conceptualisation where slums are conceived as ‘dysfunctional space’ where poverty, unemployment, and crimes are concentrated.

Dhaka being one of the fastest-growing megacities in the world, offers a perfect ground to re-examine this preconception and to deconstruct the homogenous image of the slum-like settlements. This capital city of Bangladesh has experienced a phenomenal expansion in its population and size throughout its history, making Dhaka 11th in the list of largest megacities (cities with population of more than 10 million). With 30% of Dhaka’s population living in slums and squatter settlements (I. Ahmed, 2016), urban poverty remains perhaps one of the most discussed problems of Dhaka in not only the intellectual discourse but also in the media coverage, government policies, and even in the daily conversations of the people living in Dhaka. Most of the time the framing of this problem is inspired by the Western notions of cities where the proliferation of informal settlements

are seen as “failures of development”(Sheppard, Leitner, & Maringanti, 2013). Thus, Dhaka’s informality is seen as “messy” and a salient challenge to further urban development. For example, the World Bank report developed by Bird et al. (2018) has doubted that Dhaka can use the full potential of the economic agglomeration due to the excessive congestion and low liveability caused by massive informalities. Slums and other squatters have been represented as the flag bearer of urban poverty. "Slum dwellers" and "poor" are used interchangeably and there have been many studies (c.f. Hossain, 2008; N. Islam, 2005; Rana, 2011) representing slums as the pocket of urban poverty in Dhaka.

In the next section, I dive deeper into the existing pre-conceptualisation of slums before discussing my approach to re-examine these pre-conceptualizations in this research. I also layout my research objectives and questions in this chapter. An overall structure of the thesis is presented at the end of this chapter.

1.2 The predominant view of informal settlements

The predominant way of referring to informal settlements in Bangladesh and also elsewhere is through descriptions of their low level of physical infrastructure and by associating various negative terms with the people living in them (Nijman, 2010; Revell, 2010). Terms such as ‘illegal’ are also associated with informal settlements as most often they are located on lands that are owned by the government or by private individuals or corporations. This predominant negative characterization of informal settlements is reflected in the ways they are conceptualised and discussed, as well as in the design of interventions by various national and international actors. Despite decades of theoretical and empirical research on informal settlements, these dynamic spatial settings have been conceptualised through the Western notion of informality, influenced by the conceptual separation of formal and informal, where formal is preferred over informal. Consequently, characterizations such as irregular tenure, poor housing conditions, low level of service and facilities, low-income residents, and lack of access to the formal job market, to mention a few, dominate most national and international discourse around informal settlements. Therefore most of the attention has been on transforming this ‘dysfunctional’ informal space into a ‘normal’ one, through programmes such as land titling, rehabilitation, resettlements, and so on (Porter, 2011; A. Roy, 2005; A. Roy & AlSayyad, 2004).

UN Habitat (2008), for instance, refers to informal settlements as being built outside the formal land tenure system without the permission of authorities. It defines an informal settlement as having the following characteristics: lack of durable housing and inadequate building structures, overcrowded and insufficient living spaces, lack of basic services such as water supply and sanitation, hazardous environmental conditions, insecure land and housing tenure, and prevailing poverty and exclusion at various levels. The emphasis here on terms such as ‘lack’ and ‘inadequacy’ is quite evident. Such conceptualisations are also reflected in various country-level definitions, though there are variations from country to country. In the national and international policy arenas, slums are mostly described merely as a particular object or thing that has surfaced through flawed uncontrolled urbanisation rather than trying to understand the inherent processes at work in slum-like settlements (Arabindoo, 2011; A. Roy, 2011).

This tendency holds for Bangladesh. The general understanding of slums is that they are heavily populated parts of an urban area with a low level of housing structure and where access to basic services and infrastructure tends to be limited or badly deteriorated. Terms such as slum, squatter settlement, informal housing, and low-income community are used somewhat interchangeably in Bangladesh. According to Bangladeshi government (BBS, 2015) “slum” is defined as a cluster of compact settlements of five or more households which generally grow unsystematically and haphazardly in unhealthy conditions and exhibit the following characteristics:

1. Temporary housing structures made of cheap materials;
2. High population density (household members share one room, and three or more structures are situated in one decimal of land);
3. Established on government, semi-government or private land;
4. Insufficient and unsafe water supply and sanitation (15 people sharing one toilet);
5. No or very limited lighting and road facilities; and
6. Livelihood depends on informal non-agricultural jobs.

These definitions are of course very useful when it comes to identifying slum settlements or census-taking and operationalizing interventions regarding slum improvements. However, close

attention to these definitions indicate that although broad-ranging, they are strictly focused on the physical condition of the settlement (e.g., housing, shelter), its lack of services and facilities (e.g., inadequate water supply and sanitation services), and its legality (e.g., tenure insecurity). The lack of adequate services and facilities as highlighted in these definitions is often associated with tenure insecurity for informal settlements. Slums not being recognised by the public authorities, the provision of services and facilities within it remain limited. Therefore, we see that physical characteristics and tenure security are the two key aspects that dominate our conceptualisation of informal settlements.

1.2.1 Slums are ‘a collection of poor housing’

The most common conceptualization of slums is in terms of their housing and shelter characteristics, assuming that the sole function of a slum is to fulfil the housing needs of the slum dwellers (Craster, 1944). Such a narrow conceptualization envisions slums as merely a space that offers cheap residential options to the ‘urban poor’, spatially segregated and functionally disconnected from the rest of the city. Such descriptions resemble the idea of ‘ghetto’ (which is equally questionable) that has developed in the Western urban context. Marcuse (1997) for instance described ghetto in American cities as a trapped spatial unit from where jobs and employment have fled but the resident cannot. He portrayed ghetto as socially isolated and spatially segregated part of the city without meaningful connections with wider urban society. Marcuse (2001, pp.3-4), in his theorisation of urban segregation in American cities, further defined ‘ghetto’ as follows:

A ghetto is an area of spatial concentration used by forces within the dominant society to separate and to limit a particular population group, externally defined as racial or ethnic or foreign, held to be, and treated as, inferior by the dominant society.

According to Nijman (2010), such problematic understandings of the American ‘ghetto’, has been also translated into the conceptualisation of slums and informal settlements of the Global South. He highlighted that the pervasive separation of residential and economic functions in Western urban planning contexts has influenced the labelling these settlements as a dysfunctional space in the city. Such simplistic understanding of American ‘ghetto’ can also be discerned in popular narratives of informal settlements by influential scholars such as Breman (1996, 2006) or Davis

(2004), for whom slum dwellers of the Global South are a ‘reserve residential army of labour’ or a ‘stealth workforce for the formal economy’.

Understanding the slum as an isolated part of the city that provides for the residential needs of the ‘urban poor’ has led policy makers to believe that the solution to the urban poverty problem would lie in providing the slum dwellers with improved housing. For instance, the Bangladesh government plans to construct 10,000 residential flats for Dhaka’s slum dwellers as its commitment to achieving SDG 11: Make cities and human settlements inclusive, safe, resilient, and sustainable (Planning Commission, 2018, p.116). Scholars such as Alam and Miller (2019) have expressed concern about typical housing projects in context of Bangladesh and argued that a resettlement programme without just opportunities to livelihood is barely going to bring any positive outcome. Despite the failure of a previous initiative in 1993 to construct residential flats for slum dwellers in Bhasantek and Mirpur through public-private partnerships, the government seems to prefer interventions focusing purely on physical aspects (Mohit, 2012). The Bhasantek project eventually failed because the slum dwellers could not afford the flats (Hussain, 2015). There is evidence from around the world that massive public housing projects to solve the problem have not yielded the desired result (I. Ahmed, 2016; Angel, 2012; Arabindoo, 2011; A. Roy, 2011). Practices such as the physical eradication of slums or the upgrading of slums by providing basic urban services and facilities are influenced by a view of slums that is focused exclusively on their physical conditions. This focus has led to overlooking other characteristics of slums that are important in the conceptualisation of urban informal settlements.

1.2.2 Legal-illegal dilemma

Another key idea that has shaped the discussion around informal settlements is the legal aspects of land ownership. It is quite common to think of slum-like settlements as illegal (when seen strictly from an ownership perspective), as more often than not, these settlements are established on government or privately-owned land. Considering the slums primarily as illegal settlements further intensifies the marginalisation and suffering of the people living there, particularly by limiting their ability to access public services and through the continuous threat of eviction and clearance.

Conceptualising slums as illegal or extra-legal has led some to believe that the ‘slum problem’ could be overcome by providing legal entitlement of the land to the slum dwellers. Highlighting the tenure insecurity of the slum dwellers as the main barrier to their socio-economic progress, economist Hernando De Soto (2000) in his influential book *The Mystery of Capital* advocated for private ownership of land to be handed over to slum dwellers. In his view, the makeshift houses in informal settlements are essentially economic assets that are “dead capital”. These assets should be revived by formal private entitlement and turned into liquid capital so people could gain access to formal credit, invest in their homes and businesses, and thus reinvigorate the economy as a whole. He identified the land of the informal settlement as a resource in a ‘defective’ form. For instance, slum dwellers have a house but no legal title, and due to this deficiency, they cannot draw benefit from their resource by representing their property in the formal market to create capital. Therefore, De Soto advocated for the formalization of informal settlements, arguing that property ownership is the reason why capitalism is a successful model in the West whereas a failure in everywhere else.

Without any doubt, De Soto’s analysis makes a powerful case for legalising the extra-legal. De Soto convincingly puts forward his argument that security of tenure will encourage the residents to upgrade their houses and settlements. *The Mystery of Capital* has received extensive media coverage and raised the level of public debate. Security of tenure has shaped interventions vis-à-vis urban informal settlements in an increasing number of countries in Latin America, Africa, and Asia. Quan (2003) has summarised De Soto’s influence on the World Bank’s thinking on tenure policies and consequent World Bank advocacies for land entitlements. However, implementing De Soto’s idea in various slums around the countries in Africa and South America hasn’t improved the situation as predicted by his theory. For instance, Syagga (2011), Payne, Durand-Lasserve, and Rakodi (2007) among others have documented the failure of legalisation policies and have challenged De Soto’s claim that private ownership would ensure the tenure security of the household.

1.3 Knowledge gap in understanding slums

The failure of both the ‘housing for the poor’ and ‘formalisation policies’ indicate that our understanding of slums is flawed and inadequate. By adopting a Western notion of poverty,

informality, and slum, we have failed to conceptually comprehend the complexity associated with informal settlements of contemporary cities of the Global South. Our predominant negative conceptualisation of slums has resulted in stereotyping slums as a metonym for a place of poverty and hardship against the growing evidence of the dynamic and productive nature of the slum. How can slum be just the collection of poor housing when Echanove and Srivastava (2009), for instance, described Dharavi, the largest slum in Asia, as “the most active and lively part” of heavily industrialised Mumbai? They highlighted the prosperity of Dharavi, once an isolated village and now not only contributing to Mumbai’s food supply but also exporting crafts to distant places without any urban planning, design, or expert knowledge. How can we ignore what Nicola Banks (2009), a prominent scholar in the field of development studies who spent three years in different slums in Dhaka, has articulated slums as a collective space of home-based entrepreneurship? She delightedly captured that while a cluster of slums in Dhaka might look like a cluster of poor residential units, in fact, there are hardly any units that are purely residential. She refused to associate slums with any negative terms as she observed that the people living in them view them in a completely different way. Regarding the homogeneous and pervasive meaning of the term ‘slum’, she mentioned that

...too often [slum] has been used as a term that instantaneously strips the dignity from the millions of people who live in these areas, and who regardless of their living conditions live proud and humble lives living in circumstances in which we ourselves would never be able to survive.

How come all the heterogeneity and complexity associated with slums are suppressed in the name of ‘illegal’ while ignoring the locally evolved property relations in these slums? As Blomley (2008) has argued that by associating a subjective and tentative notion of ‘illegitimacy’ deriving from a liberal economic understanding of property, these unique spatial settings are brought into conflict with modern urban planning regulations. The idea of property being either public or private is solely a liberal economic idea based on ‘ownership’, where it is assumed that there will be only one clearly identifiable owner who will be in control of the property (St. Martin, 2020). Current planning practices operate based on this limited idea of property. In urban contexts, this has led to frequent disputes over property because, in reality, various other arrangements can form

whereby property rights are based on more than ownership criteria. Scholars such as Krueckeberg (1995) reminds us that property is not an absolute object or thing but rather is relationally determined through one person's claim over something in relation to everybody else's claims over the same thing. It is a set of relational rights that has become narrowly defined in terms of ownership.

Could the reason that we think of informal settlements as illegal/extra-legal and advocate for land entitlement to ensure tenure security because of our failure to recognize other forms of property arrangements that are present on the ground but not captured through the mainstream liberal economic model of property? It is without any doubt that tenure security is important but why we have to think that the tenure security can be ensured only by land entitlement? The compelling case studies presented by Payne, Durand-Lasserve, and Rakodi (2007) rather suggests that land entitlement programmes often make slum dwellers vulnerable to the capitalist property market. Why is it then that we are still influenced by these hegemonic ideas about slums that fails to recognise the locally rooted property relations? Is it because of our pervasive understanding of informality and considering the very inherent informality of Global South cities as lying outside of our modernist and utopian visions of the urban, as Roy argues (A. Roy, 2005, 2011)? Because it is quite apparent that despite informality being the dominant mode of urbanisation in cities of the Global South, and despite prevailing examples of the diversity and complexity associated with informal settlements, our dominant preconceptions of them still persist in the simplified and homogenous image of slums as sites of poor housing and illegitimacy.

This critical perspective on slums sets the scene for the study of slums beyond generic and homogeneous terms that ignore their socio-spatial complexity and dynamism (Storper & Scott, 2015). Instead of conceptualising informality of the Global South in terms of what they lack in relation to Western cities (Varley, 2013:4), it has been suggested that urban theorists must seek to understand how knowledge is produced about these marginalised places (A. Roy, 2011). Informed by the postcolonial and poststructuralist approaches, the recent efforts to 'rethink informality' are therefore aimed at reorienting the axis of knowledge production (Cirolia & Scheba, 2019). Being critical of the established model of urban theories which struggle to make sense of what is going on in the rapidly urbanising cities of the South, scholars have called us to pay particular attention

to the ‘everyday’ and the ‘ordinary’ (Amin, 2014; De Boeck, 2015; Robinson, 2006). The point of such a conceptual shift is to focus on the locally grounded socio-spatial practices, treating them as diverse and particular sites from which to conceptualise informality (Jabareen, 2014; Pieterse, 2011; Varley, 2013). As Myers (2003) correctly argued that in order to understand urban space in the context of marginalisation, the social meaning of the built environment must be interrogated. Therefore, my emphasis in what follows is on understanding the interaction between the spatial and social processes that construct places such as slums.

1.4 A commons approach to slums

In this research I use the concept of ‘commons’ to investigate the ongoing dynamism through the lens of ‘the everyday’ and ‘the ordinary’ in Kalyanpur slum of Dhaka. Commons thinking is highly relevant to the debates around informal settlement, given that commons thinking deals with locally rooted property relations (St. Martin, 2020). A commons perspective allows us to unpack how property relations are formed, maintained and regulated locally by the communities without necessarily based on the state-regulated property management system. What is and what is not commons are a matter of debate in contemporary research, which will be discussed in more detail in the chapter two. There has been an increasing amount of interests among scholars in applying commons framework to various aspects of our society, mostly in the area of resource management and property relations. The commons approach allows one to blend the spatiality and sociality of informal settlements together, which are often dealt with separately in the discussion of informal settlement. Like a commons, an informal settlement is also inherently intertwined between spatial and social processes and an understanding of informal settlements remains incomplete without conceptualising how one affects the other. An investigation into the social reproduction of commons and its spatial consequences which I adopt in this research will leverage our ability to reimagine informal settlement beyond homogenous and simplistic ideologies. I examine in this research the ways in which a commons perspective by focusing on the everyday practices of the people living in informal settlements, can potentially disrupt the ubiquity of Western conceptions of informality, and challenge the underlying urban theory. We shall see later in this research how a commons framework can allows us to capture place-based collective actions, in particular the ways in which places are constructed through collective actions over commons management. A commons framework, therefore, I argue in this research can provide the means to understand the

socio-spatial nature of the construction and can be used to capture the messy, dynamic, and contextualised processes that construct urban informal settlements.

Although there is no consensus about the exact definition of commons, in simplest terms, a commons refers to a piece of property (e.g., natural resource or knowledge) that is managed by a group of people to ensure shared benefit (Blomley, 2008; Kornberger & Borch, 2015; Ostrom, 1990). This group of people are called ‘commoners’ whereas the processes through which a resource become commonly managed is known as ‘commoning’ (K. Gibson-Graham, Cameron, & Healy, 2016; Linebaugh, 2008; Nancy, 1991). This process is not necessarily intentional and peaceful but often requires complex layers of stakeholder engagement and negotiation. Though the contemporary understanding of commons encompasses a wide range of material and non-material resources, the key focus of commons study remains at the process through which commons are socially produced and maintained. Commons is also often understood in relation to the term ‘enclosure’. For instance, scholars such as Blomley (2008), Lee and Webster (2006) have depicted commons as dialectically opposed to the spaces of enclosure – whether in the form of private property or of state-controlled space. Enclosures are governed by an exclusive group in society, producing benefits for that group to the exclusion of others. According to them, commons and enclosures are not fixed, binary categories of space but rather exist on a spectrum and in constant states of transformation between each other. Commons spaces become enclosed through acts of exclusion. The relationship between commons and the concept of enclosure provides the basis for links between the study of commons and the study of informal settlements.

In this research, I ask this questions: whether can we imagine urban informal settlements as a commons? What characteristics of commons do urban informal settlements possess, and what new perspectives can be derived by theorising informal settlements from a commons perspective? The answers to these questions can significantly help us to develop our approach to urban informal settlements, especially when we desperately need to reorient our understanding of informal settlements. As discussed earlier, most of the framing around informal settlements is influenced by Western perspectives of informality, which hinders our ability to see and value the very agency of the people living in these slums. Various efforts being made by people in their everyday lives to shape their living spaces (by performing diverse livelihood activities) are either ignored or

studied under the broader scholarly label of ‘informal sector’, which consequently devalues these efforts to the level of ‘struggles’ and/or ‘inevitable surviving strategies’ of the ‘poor’ (A. Roy, 2005). Despite a large body of evidence indicating that these efforts are often carefully crafted by the people to facilitate their individual and communal wellbeing, their activities are conceptualised as “flawed” or “inadequate” in the mainstream planning and policy discourse in most Global South cities. As a result, not only has what they do not gained significant attention among policymakers, the place where they live has been coloured with all sorts of negative connotations (e.g., a place that is dirty, crime/violence-prone or a pocket of poverty) in the public discourse as well.

It is interesting to note that despite a wide spectrum of research in general about ‘commons’ and the recent surge of enquiries in commons specific to urban areas (Kip, 2015), there is substantial lack of empirical work that investigates informal settlements from the analytical lens of ‘commons’. In general, an informal settlement fulfils the three elements that are fundamental to the investigation of commons:

1. a common resource, for instance, the piece of land on which the slum dwellers live;
2. the commoning practices, such as the institutions that govern the functions of the commons; and
3. the community, that is the slum dwellers themselves working as commoners.

These constitutive elements have made informal settlements an interesting ground for commons research and provide the opportunity to study the spatial setting of the settlement as a resource, as well as the process involving the social constructions of that settlement known as commoning. Moreover, in the contemporary urban environment of the Global South, informal settlements operate within a landscape of privatisation and widespread socio-spatial enclosure, which are also part of commons discourse. Standing in the way of intensive neoliberal urban development practices, these informal settlements provide profound examples of living together and caring for others which in many ways deserve to be assessed through commons perspective.

Bringing commons thinking into the discussion of informal settlements can also open new avenues for urban planning. In general, contemporary urban planning is at odds with informality. In fact,

many scholars have criticised the very top-down approach of planning for not being compatible with the informality. For example, UN-Habitat finds:

Planning is still weak in terms of how to deal with the major sustainable urban challenges of the twenty-first century: climate change, resource depletion, rapid urbanization, poverty and informality. (UN-HABITAT, 2009, xxiv)

But commons thinking opens the way for planning approaches to informality by deconstructing illegitimacy around informality. Commons thinking allows us to rethink property rights, which is fundamental to planning, and the convergence between commons and informality can allow planning discourse to see informality as within the property relation as opposed to outside of it. Commons can emancipate planning by broadening its existing narrow conceptualisation of property, that of a binary division of public and private. This binary division is largely derived from the liberal economist model where property is all about ‘owning’ and that ownership is unitary and stable (Blomley, 2008). While this narrow and limited understanding of property dominates current planning practices around the world, commons thinking challenges such views by reimagining property as beyond an object or a thing and, in fact, relational. Therefore, recognition of commons as a form of property relation beyond the liberal, ownership-based public-private dichotomy can significantly change the way urban informality is currently conceptualised, talked about, and dealt with (Porter, 2011). Thus, commons thinking can reimagine urban informal settlements beyond the notion of ‘disorder’ and ‘illegality’ or as just a kind of ‘coping mechanism of the poor’.

1.5 Study of commons in the context of Dhaka’s informal settlement

The urban landscape of Dhaka consists of intensive enclosures, privatisations, and neoliberal exercises of power by states and political elites, particularly at the site of urban informal settlements. These characteristics are often materialised in the form of eviction, clearance, and resettlement of the slum and the slum dwellers, which literally deny the rights of a large number of people and preserve the interest of the urban elites. Conversely, there are also attempts by these marginalised people to claim and reclaim their spaces of enclosures through the acts of various livelihood practices, household activities, voluntary activities, care works, and other diverse forms

of socio-economic activity. These activities contribute to recognising the space of informal settlements as shared by reorienting the notion of inclusion and exclusion and by establishing collective responsibilities for its care and governance. This process, which is not always peaceful, shapes the making and remaking of informal settlements and is also prominent in commons discourse. Therefore, while commons has the capacity to link these individual and collective constructive efforts in place, it also illuminates the relationship between social and spatial marginalisation.

Despite the potential of using a commons framework in exploring informal settlements, there is hardly any research, particularly in Bangladesh, that has attempted to combine these two areas. Research on commons in Bangladesh is largely focused on natural-resource commons such as forests, wetlands, and fisheries (for instance see Bayazid, 2016; Hossain & Rabby, 2019; Mamun, Brook, & Dyck, 2016). These studies have quite correctly highlighted the social, environmental and economic benefits of shared management of natural resources. However, studies that have paid particular attention to the formation of commons in urban context are largely limited.

Another point is the missing spatial lenses in commons study. Though I discuss the spatial perspective of commons in more detail in chapter two, it is important to highlight here that in general most of the studies of commons have treated space as ‘given’ or ‘out there’ and to use it as a background object. However critical social theorists such as Lefebvre (1991) and Soja (1980) have reminded us that space is not just a geometric object to contain our social actions but is socially constructed by us. Similarly, a relative understanding of space is advocated by Massey (2005), who argued that space is not a given neutral and passive geometry but rather is continuously produced through socio-spatial relations. Therefore, like scholars such as Giordano (2003) and Moss (2014), I consider commons as inherently social and spatial. I reemphasise the spatiality of the commons in this research by bringing the social constructive nature of space into the analysis. This investigative focus on the spatiality of commons has the potential to unsettle some of the more entrenched assumptions about informal settlements. Therefore, what I mean by commons is integrally associated with the spatiality of the commons.

1.6 Informal or Slum

The term ‘slum’ is controversial as it most often carries negative connotations about a particular place and its people, as discussed above. Rejecting the idea that informal settlements are homogenous pockets of poverty (B. Marx, Stoker, & Suri, 2013), I recognise in this thesis the significant variability of slums in terms of size, location, demography, history, service provision, the security of tenure, level of commoning practices, and so on. The term ‘slum’ is indeed inadequate shorthand for the sheer diversity and heterogeneity of urban informal settlements: the dynamic work and livelihood activities and the contested nature of space and power politics. Alternatives to ‘slum’ could be ‘informal settlement’ or ‘low-income settlement’, though evidence around the world also suggests that not all informal settlements are slums and that there are various types of informal settlements, slums being just one of them. Moreover, the term ‘informal’ is often used as the binary opposition to ‘formal’ where ‘informality’ is seen as some sort of devalued practice that always lacks what it takes to be ‘formal’. Use of the term ‘slum’ over ‘informal settlements’ can help to avoid such binary dilemma. However, in this research the term ‘slum’ and ‘informal settlement’ have been used interchangeably to mean a unique spatial setting characterised by a particular logic of urbanisation, without implying defectiveness or deviance. By using the term ‘slum’ in this research I intend to make a strong case for its use beyond the negative connotation associated with it. The term ‘slum’ is also used by the Bangladesh Bureau of Statistics (BBS) and is commonly used by Bangladeshi people which influenced by preference to use ‘slum’ over any other terms.

It should also be noted here that this research recognises the diversity and uniqueness of each settlements and therefore has no intention to make generalised claims about these settlements. Kalyanpur slum, the case under study in this research, should not be treated as representative of all slums, not even within Dhaka. Each slum has its unique character and context and thus should not be treated as a prototype. The claims that are being made in this research regarding Kalyanpur slum may not necessarily resemble with other slums. The frequency of eviction and fire incidents throughout the history of Kalyanpur slum has made this slum different in many ways from other slums and therefore the contested nature of space in Kalyanpur slum may vary significantly with other slums and informal settlements. Nonetheless, Kalyanpur slum can be seen as a signpost in

view of the proliferation and persistence of slums across urban landscapes in Dhaka and other parts of the world.

Another important point to note here is the significant variation in income and assets between individuals even within the same slum such as in Kalyanpur slum. This observation is important to challenge the assumption that all slum dwellers are ‘poor’ (Burra, 2005; Moser, 2009). Rather than how Volait and Nasr (2003) described slum dwellers, as ‘impotent, passive and guideless’ spectators who are just the recipients of the physical and spatial changes around them and having no control and understanding over those changes, I align myself with the understanding that the residents instead deploy a range of strategies to address their needs and priorities (Satterthwaite & Mitlin, 2014). This thesis recognises that one such strategy – commoning – is central to ensure wellbeing and survivals and such strategies of the marginalised people has the potentials to contribute to the broader politics of ‘redistribution, recognition and representation’ as argued by scholars such as Blomley (2008); Fraser (2005); Harvey (2005).

1.7 Research Aim, Objectives and Questions

The overall aim of this research is to contribute to the growing body of research reimagining urban informal settlements. The broader question that this research seeks to answer is whether we can think of the slum as a commons, and if so, then how can that help us to challenge our preconceived ideas about urban informal settlements? This answer is not only vital to contribute to our understanding of slums but also to our understanding of commons. By incorporating a spatial perspective on commons in the analysis, this research also intends to bridge the gap between commons and its spatial considerations. Linking commons, informal settlements, and a spatial perspective allow us to challenge the simplified and homogeneous narratives about slums. Therefore, this research will achieve an increased understanding of residents’ views and their constructive efforts in place, which are often neglected in the planning and policy arena.

1.7.1 Research Objectives

The specific objectives of this research are the following:

1. To explore the process of commoning in Kalyanpur slum.

2. To foreground the intertwined relations between commoning practices and their spatial outcomes.
3. To highlight the ways in which a commons perspective on informal settlements can challenge the pervasive conceptualisation of slums.

1.7.2 Research Questions

The specific questions that this research intend to answer are the following:

1. What type of space is Kalyanpur slum? Or what is Kalyanpur slum?
2. If Kalyanpur slum is theorized as a commons, then what are the social and spatial characteristics of this commons?
3. How does an understanding of Kalyanpur slum as a commons help us to enrich our existing conceptualization of informal settlements?

1.8 Outline of the thesis

I have started this chapter by highlighting our existing knowledge gap on urban informal settlements. I argued that without a deeper understanding of urban informal settlements, it becomes extremely difficult to design interventions for slums that are just and sustainable. The apocalyptic and destructive approach, as well as the failure of numerous slum improvement/upgrading programmes around the world, suggests that we need to critically interrogate our understanding of informal settlements. Most narratives about slums and other informal settlements carry a notion of negativity about these places. I have touched briefly in this chapter on how the popular discourse about slums, colouring them as dirty and crime- and poverty-prone areas, has played a significant role in massive slum clearances and eviction drives all over the globe. Discourses that stigmatise slums and the people living in them have generated a homogeneous notion of slums that ignores the diversity and dynamism exhibited in the informal settlements of the Global South. Challenging the hegemonic discursive notion of slums, the actual on-the-ground heterogeneity and complexity have been interrogated by many researchers across disciplines. These scholars have called for more in-depth and bottom-up interrogation of urban informal settlements, and therefore I adopt the commons approach in this research as an investigative framework that enables this.

Following this introduction, the literature review in chapter two explores the theoretical framework of commons in order to apply in the context of urban informal settlements. The first few sections of the chapter provide an overview of commons theory on the basis of Elinor Ostrom's "*Governing the Commons*" that came out during the 1990s. Ostrom provides a profound theoretical basis to argue that commons do not necessarily end up in tragedy. Based on the critiques of Hardin's "The Tragedy of the Commons", Ostrom convincingly put forward the idea of collective governance of natural resources where communities can organise themselves around the management of the natural resources without destroying or exploiting the resource itself. Ostrom argued that this form of self-organising governance is not tragic but actually practical and rational. Chapter two also highlights how Ostrom's argument around commons and its governance has been reflected in two major approaches to commons: institutionalist and alterglobalisationist (Huron, 2018). While the institutionalist approaches characterise commons with strict subtractable and nonexcludable attributes, the alterglobalisationist approaches hold more flexible views on these attributes.

Chapter two goes further to discuss the extent to which urban informal settlement could potentially possess these attributes and consequently highlights some of the core ideas around urban commons. In the later part of the chapter, Gibson-Graham's idea of commons through the diverse economy framework is also explored. The way commons has been framed by Gibson-Graham and community economies scholars provides us with a practical tool to perform commons analysis on urban informal settlements. For these scholars, what is important is the process through which a particular type of property (private or public) is transformed into a commons. This idea is interesting in the context of urban informal settlement given the focus on the agency of the slum dwellers, who contribute enormously to ensure their individual and collective wellbeing. This research uses the tool proposed by Gibson-Graham, Cameron, and Healy (2013) to explore the locally-evolved, daily activities of the slum dwellers, consequently answers the question of whether we can theorise 'Kalyanpur' slum as a commons. Chapter two ends with the discussion around spatiality of commons, a crucial aspect of commons that is often overlooked. Though spatiality is inherently linked with commons, it often remains in the background of commons analysis. The chapter highlights the notion of space in commons discussions and its importance in the reimagination of urban informal settlements.

Chapter three outlines the research approach and methodology used in this thesis. The chapter starts with outlining the philosophical underpinnings of the research followed by the process of data collection, selection of study area, tools for data analysis, and the scope and limitations of the research. Particular emphasis is placed on the selection of respondents and the specific methods deployed in collecting various types of data, including secondary data, semi-structured interviews, GPS tracking, and field observation. The ethical, logistical, and methodological limitations of the research, including managing expectations, sensitive research topics, and the vulnerability of research participants, is discussed in the later sections of the chapter.

Chapter four is the first analysis chapter of the thesis. Using Gibson-Graham's tool of commons analysis, this chapter outlines the way five key aspects of commons are performed by the slum dwellers. The first few sections outline the history, population, housing and land tenure type, eviction threat, water and sanitation provision, and political context of Kalyanpur slum. Even though Kalyanpur slum has been selected according to specific criteria (outlined in chapter three), an overarching trend emerges whereby local political leaders and slumlords control and mediate services, land, and housing. However, the common people of Kalyanpur slum organise their daily lives in such ways that the slum works for the best of their common interests. It is acknowledged that residents are more likely to mobilise around their needs and priorities, which may differ to those promoted by NGOs and donors.

Chapter five is the second empirical chapter of this thesis where the spatiality of the commoning activities of the slum dwellers is foregrounded. This chapter argues that commoning is not only a social process but also a spatial process. More correctly to say, the social and spatial aspects of commoning impact and influence each other in a way that can enable and/or disable each other. Commoning activities leave spatial traces which can be studied and visualised through the exploration of the spatial configuration of the commons. An approach called 'space syntax' is used in this chapter to study the spatial configuration of Kalyanpur slum and the way this configuration is related to the commoning activities of the slum dwellers. This chapter argues that unlike natural resource commons, there is a varying degree of commoning activities throughout the slum which is correlated with the way space is configured. The most integrated spaces are also the spaces where most of the commoning activities take place. The most integrated spaces are also often the

space of intense contestation and conflict. The integration of spatial analysis with commons analysis allows us to foreground the heterogeneity and complexity associated with slums which is discussed in detail in this chapter.

In chapter six, I bring the findings from the previous two chapters to address the research questions asked in this first chapter. Specifically, I highlight how the perspective gained from the commons analysis of Kalyanpur slum help us to deconstruct the housing-based and illegitimacy-driven conceptualisations of urban informal settlements. I discuss further the contribution that the commons approach can bring into the debates around urban informal settlements and reimagining slums beyond the narratives of ‘lack’ and ‘struggle’. I argue that the integration of spatial perspective, commons and informal settlements can not only challenge our existing pervasive conceptualisation of slum but also inform the theoretical discussion around urban commons.

Chapter seven is the concluding chapter of this thesis where I focus on how we can move forward in this context. This chapter summarises the answers to the research questions, drawing on empirical evidence. This chapter also outlines the potential actions that scholars and policymakers can take, to move towards more ethical and enabling slum improvements in Dhaka. I highlight the extent to which findings from Dhaka have relevance for other rapidly urbanising contexts and outlines future areas of research. Though complex, a rigorous analysis of intra-slum dynamics, the instrumental value of collective actions, negotiations, contestation, and conflicts are argued to deepen our understanding of informal settlements of the Global South.

Chapter 2 : Theoretical framework for commons analysis of urban informal settlements

2.1 Introduction

This chapter introduces key ideas around commons and its relevance to urban informal settlements. The chapter is divided into six sections, starting with a brief overview of commons theory in section 2.2. Borrowing the ‘institutionalist’ approach from Amanda Huron, section 2.2 outlines the key assumptions around commons and the development of the common pool resources (CPR) concept. The section further discusses the ‘subtractable’ and ‘nonexcludable’ characteristics of common-pool resources as assumed by the institutionalist scholars and the extent to which these fundamental characteristics are relevant in the context of urban informal settlements. Drawing on the limitations of institutionalist approach, section 2.2 also describes the concept of urban commons. It highlights the socio-political questions around commons as put forward by ‘alterglobalisationist’ scholars in the development of the concept of urban commons. This section also explores the theorisation of urban commons and how it can contribute to our understanding of urban informal settlements. The specific debates and contradictions in theorising commons for urban settings are also described in this section in detail.

Building from these debates, section 2.3 focuses on articulating a practical framework that can guide researchers to investigate urban commons. The concept of diverse economies, developed and popularised by Gibson-Graham is discussed in this section. The key idea of the diverse economies framework is to take note of the economic diversity present in our society. In doing so, this framework enables researchers and activists to focus on emerging everyday practices in households, in communities, and across various other scales. One diverse economic practice that these scholars pay attention to is the diversity of property relations in economies. Commons is understood to be a form of property relation between groups of people and a variety of property types beyond private and state-owned. The commons analysis tool proposed by Gibson-Graham and community economies scholars are discussed in section 2.4. In this section, I discuss the way in which the commons analysis can potentially foreground the agency in everyday and ordinary practices of the slum dwellers. By foregrounding these agentive powers of the slum dwellers,

which are revealed through commons analysis, I intend to disrupt the pervasive presumptions and hegemonic knowledge around informal settlements.

While the sociality of commons is mostly discussed throughout this chapter, the spatiality of commons is explicitly outlined in section 2.5. This section interrogates what is meant by the spatiality of commons and why it is fundamentally important in the discussion of both commons and informal settlements. Traditionally the spatial perspective in the discussion of commons (especially in CPR studies) has largely been limited to the notion of a static external boundary or border (Moss, 2014). An explicit and clearly identifiable physical boundary or border of a commons is understood to be the fundamental characteristic of a pooled resource. However, with the broader theorisation of commons (e.g., urban commons, global commons, and knowledge commons) and the development of critical spatial perspectives, the need for more informed understandings of the spatial perspective of commons has been highlighted. Section 2.5, therefore, highlights the missing spatial perspective in commons analysis and hints that this research considers informal settlements as a perfect ground to combine the commons and the spatial perspective. The chapter concludes by summarising the potentials of commons analysis in understanding the micro-level socio-spatial process in urban informal settlements that can bring a new perspective in our understanding of them.

2.2 An overview of commons

Traditionally commons are understood as pooled resources consisting of natural and social objects that are used and assessed jointly and freely by the community (Clausen, 2016). ‘Commons’ often refers to some sort of physical spaces or services which are considered vital for the subsistence of a group of people (Foster, 2011; Lee & Webster, 2006). Though the natural resource commons such as land, waterbodies, forests, and fisheries are the most documented commons in literature, there are increasing tendencies in the field of social science research to theorize other forms of commons such as knowledge commons, creative commons, social commons, and so on. In general, commons are understood as made up of three basic elements: a resource, a group of people who rely on that resource, and a set of principles that governs the management of the resource (Huron, 2018). One fundamental aspect of commons is that it is used for the subsistence of the daily lives of its members and not used as a means for profit-making. Though commons can seemingly refer

to the resource itself, the intertwined social practices of transforming and managing the commons are equally important in the study of commons, practices known as commoning (Fournier, 2013; K. Gibson-Graham et al., 2016; Linebaugh, 2008).

It is interesting to note that much of the theoretical and empirical studies of commons in 20th century portrayed commons as antiquated (Agrawal, 2002). For instance, the studies of historic English commons and their enclosures suggested that commons are destined to disappear with the emergence of capitalism (Agrawal, 2002; Fournier, 2013). Similarly, the commoning practices of rural societies around the world are portrayed as backward or irrelevant to modern life. This view was further confirmed by Hardin's (1968) controversial essay 'tragedy of the commons' arguing that state or private ownership could offer better management of the natural resources. In favour of such policy recommendation, an imaginary meadow on which a large number of herders put their cattle to pasture was illustrated as a thought experiment. The meadow was a scarce common resource over which none of the herders had exclusive ownership. The argument made was that this commons meadow is subject to overexploitation and constantly threatened by overgrazing as each individual herder intends to maximise their own individual benefit, and it is only rational for an individual to add one more head of cattle to their herd. While the costs of overgrazing are distributed amongst all, the potential gain of adding yet another head of cattle is privatised. The benefit of adding cattle accrues immediately to the individual owner of the herd, while the cost of degrading the pasture is borne in the long term by all the herders as a whole. Central to this dilemma is the 'free-rider problem' whereby individuals are supposedly motivated not to contribute to joint efforts but to free-ride on the efforts of others. Commons in this view are predicted to end up with a tragic outcome if left alone to the devices of the rational and self-interested community members. Therefore, it is argued that the best way to ensure the sustainability of natural resources is to establish either a private or state control mechanism of resource management.

Despite the tragedies predicted in some studies, the commons persist along with the threats of their enclosure. Commons not only persist but in many cases commonly held resources have been found to play a crucial role in the subsistence of the community and the sustainability of the resource. In fact, given the current level of environmental degradation, there is certainly doubt as to the extent

to which private and/or state control mechanisms have successfully preserved the interest of the natural resource (Federici, 2009; Nonini, 2006; Ostrom, 1990). On the other hand, local users, having the greatest stake in the sustainability of resources, are the ones who develop various creative mechanisms to promote viability and sustainability of the commonly held resources (De Angelis & Harvie, 2014; Fournier, 2013). Nobel laureate scholar Elinor Ostrom's work has explored much of these mechanisms since the late 20th century, and this has shifted the discussion about commons from inevitably tragic to a sustainable form of resource management.

In her book *Governing the Commons*, Ostrom (1990) has been critical of the kind of policy recommendation implied in the 'tragedy of the commons' and argued that it is possible both empirically and theoretically to conceive of self-organising forms of collective action that avoid the tragedies predicted by Hardin. To crack the thought experiment portrayed in the 'tragedy of the commons', Ostrom reemphasised the fact that people can't be fully rational as they do not have access to all the information needed to make a completely rational decision. Therefore, they need institutions (formal and informal) to organise themselves and regulate economic exchange. Ostrom, therefore, argued that it is through institutional arrangements that the free-rider problem could be prevented and reciprocity can be enhanced. She theorised the collective actions of those involved as the voluntary governing principles that lead the community members to organise themselves and manage the residual of their efforts to ensure long-term benefits. For Ostrom, therefore, it is important to analyse the organisational and institutional arrangements of those principles through which the members (e.g., herdsman) communicate with each other and, in doing so, potentially avoid their tragic fate. What is suggested from such theorisation is a third way of governing collective actions which is based on neither state control or privatization but rather historically grown, institutionalised rules that allow for self-governance of the commons. The challenge is not how to address the 'free ride' but to create and enable an environment in which those appropriators organise themselves to act collectively rather than acting independently to obtain higher collective benefits. She also points out that although these self-organising processes may not necessarily end up creating an organisation, it is the process of organising that plays the most crucial part.

Though it was from the early 1980s that the scholarly debate around commons started to shift from a tragic perspective to a viable option for resource management, Ostrom's works have significantly propelled this shift. Ostrom unveiled the misconception about commons and pointed out that ordinary people are capable of creating institutions to sustain shared resources. Since winning of the Nobel Prize in 2009 for her work on commons, there has increasing interest among the scholars from diverse disciplines to theorise not only tangible commons (e.g., forest, land, waterbody, fisheries) but also for elusive/impalpable commons (e.g., knowledge, internet). Huron (2018) has categorised the contemporary discussions around commons into two streams of thought: institutionalist, which mainly focuses on the governing mechanism of CPR, and alterglobalisationist, which focuses on the political aspects of commons such as urban commons. The following sections discuss both CPR and urban commons by portraying the underlying theorisation by institutionalist and alterglobalisationist scholars. If we want to understand the informal settlements as commons, it is important to explore the extent to which the characteristics of CPR and urban commons are possessed by informal settlements in general.

2.2.1 Common Pool Resources (CPR): An Institutional Approach to Commons:

It is Ostrom's argument in the study of common-pool resources (CPR) that laid the foundation of the institutionalist approach to commons (Huron, 2018). CPR refers to a resource that is subtractable and nonexcludable. Terms such as 'common pool resources', 'common property resources', and 'common property regimes' are often known by the acronym CPR and have been broadly theorised by institutionalist scholars over the years as simply the commons. Natural resources, such as forests, fishing waters, and grazing lands, are the best example of a common-pool resource. Subtractable means that the use of the resource by one person subtracts from its use by others. Subtractability differentiates commons from public goods. Public goods are less or non-subtractable (it is thus non-rivalling or non-competitive), such as air and sunlight, the consumption of which does not reduce the availability for others to consume. On the other hand, nonexcludable means that it is not easy to exclude people from using the resource. Nonexcludability differentiates commons from private goods. Private goods are highly excludable as only the owner has the sole right to the good. CPR in contrast to public and private goods are subtractable and non-excludeable and therefore very valuable. Competition can lead to overexploitation (De Moor, 2011).

The portrayal of the grazing field in the ‘tragedy of commons’ is one example of such a common-pool resource for which institutionalists have argued that collective governance by the people who actually use and depend on the resource is a third way of governing the commons, beyond just private management and state control. Thus the institutionalist approach to commons focuses mainly on institutions, often known as common property regimes, that people create to enable collective and sustainable governance of resources (Huron, 2018).

The ways in which commons are being theorised by institutionalist scholars have great relevance for the study of urban informal settlements. The key factor here is the bringing of a pluralistic conception of the commons by recognising various forms of self-organisation and collective governance that in many ways facilitate the conception of informal settlements as commons. From the kind of descriptive framing of the commons offered by institutionalists, an informal settlement is a shared resource that belongs to all of its inhabitants and needs to be managed to avoid the kinds of problems or tragedies that beset any other commons. In the absence of an institutional mechanism to govern this shared resource, it is obvious that a high-density space like a slum would end up with the kind of tragic fate as described in many literatures (Milbert, 2006; Patel & Stough, 2012; Soto, 2000). As such, the commons claim is importantly aligned with the idea of a ‘community-based’ and/or ‘participatory’ approach to planning that advocates for more inclusive decision making regarding informal settlements (UN-HABITAT, 2016b). Therefore, the institutionalist approach to commons is highly effective for upholding various formal and informal institutions of the inhabitants as advocated by Porter (2011), Robinson (2006), and Roy (2011) to shape decisions about their collective resource: the settlement itself.

What is missing in the institutionalist conception of commons is the notion of the social construction of the resource and the larger socio-political structures within which it necessarily exists. The CPR as conceptualised by the institutionalists seems to be static, and they do not seem interested particularly in the making and remaking process of the commons under the broader political orientation. Though institutionalist scholars have been increasingly interested in theorising ‘new commons’ such as the ‘knowledge’, ‘digital’, or ‘information’ commons, which do not necessarily possess the characteristics of natural resources (Hess & Ostrom, 2007), the underlying focus of these scholars have largely been the managerial aspects of the commons rather

than its socio-political construction. The idea of seizing, or reclaiming, a commons is rarely taken up in the scholarly writings of institutionalists (Huron, 2018; Kornberger & Borch, 2015). Thus, the institutionalist understanding of commons is not entirely useful in helping us to think of informal settlements as commons because of its lack of interest in the topics of neo-liberalisation, capitalism, inequality, and power dynamics, topics that are associated with our contemporary understanding of informal settlements.

2.2.2 Urban Commons- An Alterglobalisationist Approach to Commons

The commons as theorised by the institutionalists is problematic when applied in the urban context. In most of the literature, commons has been used as a general term referring to a resource that is being shared by a group of people. It is not only the generic conceptualisation of the resource as ‘object’ that raises serious questions (as mentioned earlier); the notion of ‘shared by a group of people’ also needs to be critically examined in the urban context. For instance, questions such as “who are included in this group of people and who are not?” are vital. How are the boundaries of a commons (if any at all) defined, and how do the power dynamics among the members of the group work? Moreover, how do commons come into being and continue to be sustained in the urban context?

Answers to these questions are unique in the urban context and fundamentally differentiate urban commons from common-pool resources. Although the concept of urban commons is still in its developing phase, I have found the discussion around urban commons fundamentally relevant to the context of urban informal settlements. It is not only the term ‘urban’ that can potentially link urban commons with urban informal settlements but the question of the socio-political dimension that is embedded in their respective conceptualisations. Many scholars have uncritically translated the notion of common-pool resources to the context of cities by defining urban commons as collectively shared urban resources that are also subject to subtraction and are nonexcludable (Foster, 2011: 64), but other critical urban scholars such as Markus Kip (2015), Martin Kornberger & Christian Borch (2015) and Brigitte Kratzwald (2015) have rejected a straight translation and rather argued that the urban commons are more than the mere problem of resource management.

The development of urban commons thinking can be linked with the emergence in the 1980s of what Huron (2018) has called the “alterglobalisationist” movement. This movement is concerned

about the deepening inequality, suffering, and environmental devastation caused by the hegemonic capitalist forms of globalisation. The emergence of this movement was at a time when peoples around the world were struggling to keep hold of their common lands in the face of the imposition of structural adjustment policies and agricultural reform. This movement was therefore rooted in both activism and scholarship as people across the world were engaged in a web of uprisings against aggressive capitalist reforms. These uprisings, as highlighted by Amanda Huron (2018), soon turned into global movements spread across the cities of both the Global South and Global North, where, for example, people engaged in squatting as resistance to structural adjustment policies. Alterglobalisationists conceptualise commons as ‘necessary for subsistence, collectively managed, and embedded in social relations’ (Huron, 2018, pp.28). By pointing towards the social relations embedded in the commons, alterglobalisationists have paved the way to theorise the urban commons. For instance, alterglobalisationists Hardt and Negri (2009) characterised the commons as not only the source of wealth but also the means of producing and distributing such wealth. By placing the city at the centre of such relations, they argued the urban commons as the result of various relational arrangements. Therefore, the unique social relations that prevail in cities also differentiate urban commons from common-pool resources.

Before we look at the ways these social relations are unique for cities, it is important to remind ourselves of the distinction between ‘the urban’ and ‘the city’. I find Wirth's (1938) classic essay “Urbanism as a Way of Life” particularly helpful in this context. The key argument for Wirth in this piece is that the physical form of the city cannot be equated with the idea of the urban. He emphasises conceptualising urbanism as a mode of life and the city as the characteristic locus of that mode of life. Urbanism, he argues, should not be identified with the physical characteristics of the city. The urban mode of life for Wirth is not confined by the morphological limits of the city but rather is manifested beyond the invisible boundary line. In a nutshell, it could be said that a city is a place, different from the process that we call the urban, an argument also made by many other scholars such as Brenner & Schmid (2014), Harvey (1996), and Lefebvre (1970). This is a powerful argument to conceptualise urban as a process rather than a thing as we try to understand what we mean by commons in the context of urban.

The unique social relations in cities are manifested through the urban, a process that is highly concentrated in the densely populated settlements we know as cities. This process characterises the modes of collectivity in cities in immaterial and relational terms. Social relations in cities are mediated by the two fundamental properties of the urban: diversity and density. In Wirth's (1938) language the urban is the engine of difference and proximity, an argument made by other classic urban scholars, including Ebenezer Howard (1965[1898]). It is these two elements that fundamentally distinguish the urban way of life from the rural one. A city, being at the forefront of urban process, is understood not merely as a collection of individuals within a dense settlement but as clusters of cultural, social, political, and ecological connections, not formed in an absolute manner but in relational terms. In such an understanding of cities and the process that makes cities unique, 'the urban' is very different from being a resource waiting for the appropriator to deploy. It is the urban that constitutes its subjects and generates the commons in cities (Kornberger & Borch, 2015). An urban commons, thus, is not a pooled resource but rather comes into being through the encounter of people, things, and ideas. Two important characteristics of the urban, namely diversity and density, are then the vital elements in relation to the urban commons.

Urban commons are shaped by diversity: What makes cities unique is their diversity and heterogeneous way of life. It is in cities where a variety of people live together in close proximity to each other, in contrast to villages, where most often people share similar backgrounds and values. The institutionalist perspectives of the commons, however, perceives the socio-cultural diversity of a community as a barrier to undertaking collective action and self-governance due to the lower level of trust that could potentially be generated among the people (Ruttan, 2006). Considering the relationship between diversity and commons, it is interesting to see how commons are formed and function in an urban context, which is characterised fundamentally by diversity. According to many, 'conflict' is thus an inherent characteristic of the urban commons. For instance, the popular case of the community garden has been theorised as a form of commons in the city (Foster, 2011; Linn, 2007) and has also been seen as a taking up land that could be used for affordable housing, a different form of commons (Schmelzkopf, 1995). Harvey (2011) therefore insists that the commons in an urban context is necessarily contested, and conflict within and among urban commons is an important practical and theoretical aspect to consider.

Density influences the way urban commons are created: High density is another fundamental characteristic of the urban. A relatively large number of people live in close proximity in a city, forcing them either to share or to compete for resources, so the matter of inclusion and exclusion is fundamentally vital in the case of urban commons. Urban commons are neither open access, like the one theorised by Hardin in his 1968 piece, or completely bounded to only be open to its defined members, as theorised by the institutionalists. Though the question of inclusion and exclusion in context of urban depends on the scale at which the commons is being investigated, urban commons is characterised by a combination of both at various degrees. It is the density of the people that makes the question of access and exclusion more obvious in cities – and therefore the urban commons is characterised by the seeming contradiction of inclusion and exclusion. The urban commons deals with the ways in which the establishment of boundaries around resources and membership to the commons are negotiated.

Urban characteristics, diversity and density are at odds with the institutionalist conceptualisation of commons. Any commons to be theorised for the urban has to come to terms with these two properties of the urban. A close look at the meaning of collectivity in the urban context is helpful here to conceptualise the way commons can form in the sheer presence of diversity and density. After all, some sort of collectivity is the prerequisite for forming commons. To understand the meaning of collectivity in the urban context we can start with looking at the way cities are being conceived of by most urban scholars: as a relational configuration where the relationality is configured through the various forms of density (Howard, 1965; Park, Burgess, & McKenzie, 1925; Wirth, 1938). Density in a city is produced by a large number of people living within a confined space and in close proximity. What makes property, for example, in cities valuable in the first place is not bricks and mortar but the proximity to other buildings and the density of activities unfolding between them (Howard, 1965). The relationality fuelled by the density engenders various kinds of collectivity. For instance, an increased density of people living in cities (e.g. in CBD) may cause land and housing price going up compared to the fringe/edge or low density areas. Therefore, it is the density of people that creates relative values of the land and housing in CBD compared to other parts. This process may cause the working-class people not being able to afford housing in CBD areas, which potentially paves the avenue to form urban commons such as housing cooperatives.

Heterogeneity too carries a reference to relationality, as heterogeneity is only relevant to the extent that the heterogeneous inhabitants of a city are brought into some form of relational nature with one another (Wirth, 1938, pp.10). This relationality of the city is something that constitutes value and is key to forming collectivity (Kornberger & Borch, 2015). This relationality shapes the way 'others' are encountered and negotiated and thus that collective behaviour is formed. Living in cities, with all the differentiation it entails, has a levelling, depersonalising effect, making cities particularly prone to forms of collectivity that suppress or at least suspend individuality. Therefore collectivity in an urban setting is woven through with the fibres of diversity and density, and urban commons is the corollary of the interactions in a dense network (Brenner & Schmid, 2015), a conceptualisation far from the 'pooled resource'.

The city also enables to form various socialities by endorsing various relationships shaped by the combined effects of the collective behaviour and particular personality formed throughout. The formation of social clusters or fragmentation of various groups takes place when the inhabitants have the opportunity to choose from a large number of social relationships. These relationships, however, might be neither compatible with nor mutually friendly. The highly differentiated natures of these groups often lead to the shaping of a city's landscape through contestation and conflicts. The earlier example of the community garden is relevant here; it could be seen as an urban common by one group and land abusing by another group. Another example is the use of urban streets or public squares for the purpose of social movement or protest, as seen in Taksim Square in Istanbul, Plaza del Sol in Madrid, and Wall Street in New York City (Álvarez de Andrés, Zapata Campos, & Zapata, 2015). These streets or squares were built by the state to serve a purpose other than protest or movement. However, the social fragmentations in cities enable groups of citizens to use these spaces for their shared concerns. Therefore, a city also comes into being through a series of tenuous segmented relationships.

What is implied from such fragmented social relations is that we can understand the city as a fractious agglomeration of commoners, a site for ongoing contestation about what counts as commons and who counts as commoners. Therefore for Kornberger and Borch (2015), urban commons is a particular form of experience generated by the urban process. Urban processes enable various forms of common. For instance, Harvey argues that any public goods such as water,

sanitation service, or public space cannot automatically be equated to commons. These goods must be re-appropriated by the citizens first through various forms of political action before they constitute commons (e.g., squatting, waste picking). This idea is therefore vital to many scholars working on urban commons as their concern remains with the ways in which these commons generated in cities could be distributed equally among those who make up the city, a concept known as ‘right to the city’ (Harvey, 2012).

From the key points of urban commons discussed above, we see that many of the arguments true for urban commons are also true for informal settlements. Like the urban, informal settlements are also characterised by density and diversity. Although density has often been seen as a problem for informal settlements it can also potentially bring them into being as we shall explore later in this research. Similarly, diversity is often overlooked in the negative and oversimplified representation of informal settlements, however, we shall note from the case study of this research that informal settlements possess heterogeneity when seen from a commons perspective. Evidence from around the world also poses a strong case for conceptualising informal settlements beyond homogenising and simplistic terms. Informal settlements are diverse not only in terms of its demography but also in terms of livelihood practices and socio-political activities. There are contradictions, conflicts, and contestations among various groups in informal settlements along with solidarity, co-existence, and tolerance, just like in cities. The matter of inclusion/exclusion is as highly relevant in informal settlements as it is to the discourse of urban commons. The way relationality works to create values in city also works in informal settlements by differentiating various parts of the settlement as we shall see while discussing the spatialities of the commons. The very identity of the people living in informal settlements is largely shaped by their attachments to these various parts of the settlement, as if an informal settlement is a city within a city, having its own rules and code of conduct. By embracing the process of resource construction, the urban commons discourse enables the reimagination of informal settlements that I intended to pursue in this research.

However, before theorising informal settlements as an urban commons it is important to explore some of the contradictions of urban with commons. An urban area is often thought of as a site for capital accumulation and state regulation/surveillance. These factors make it harder for commons to be formed, reclaimed, or maintained. How would a commons formed in cities reconcile with

these factors? A close examination of these contradictions allow us to shed light on the way we can theorise informal settlements as an urban commons.

2.2.3 Contradictions in urban commons

The terms ‘urban’ and ‘commons’ appear to be in contradiction with each other in a fundamental way. This contradiction is largely raised because of the way the ‘urban’ has been conceptualised by critical urban scholars. The historic account of urbanisation is closely related to enclosure and capitalism for many critical urban scholars. Cities, as seen by these scholars, have been the site to which commoners have been pushed as a result of their common lands being seized by the act of enclosure and expropriation. Marx (2011) theorised this process as “primitive accumulation” that lays the groundwork for capitalism. Primitive accumulation for Marx not only seized resources to be put into the capitalist mode of production but also forced the owners of these resources to become wage labourers. Goldstein (2013) further insists that primitive accumulation has been a generalised assault against self-provisioning by pushing the “freed” labourers into the wage market. Much of this wage work has historically been in cities. For Marx, primitive accumulation created the conditions for capitalism, based on which cities have been formed.

Harvey, an urban theorist and Marxist has also theorised the role capitalism played in the growth and expansion of cities. According to him, it is “accumulation by dispossession”, a continuous process in which lands and resources are continually enclosed and people are continually thrown into waged labour. Highlighting the rapid urbanisation that took place during the industrial period in Europe, Harvey (1996) argues that it is the exploitation of the ecological relationship between the cities and their hinterlands that fuelled capitalism, and as a result cities were free to grow. In other words, the rapid urban expansion has been made possible since the industrial revolution mostly as a consequence of capitalist accumulation and exploitation of natural resources.

Today, as Harvey points out, this process of “accumulation by dispossession” is taking place in various forms largely because of the institutionalisation of capitalism at various scales. People around the world have been thrown off their lands and forced to look for work in cities (Harvey, 2003). Especially in Global South cities, rapid rural–urban migration is taking place even though the cities themselves have ceased to provide much in the way of employment opportunities (M. Davis, 2006). For instance, Dhaka, the political and economic hub of Bangladesh has seen an

increase in population from 3.4 million to 18 million between 1981 and 2015 (RAJUK, 1997; BBS, 2011; Bird et al., 2018). With the adaptation of free market economy since 1982, more and more people have migrated to Dhaka in search of work and livelihood (Abdin, 2016; Mondal, 2014). With neoliberal urban policies in place, Dhaka has seen the emergence of new elites as well as the proliferation of informal settlements throughout the cities resulting about 30% of the people in Dhaka living in these settlements (I. Ahmed, 2016). Harvey (1996, 2005) links this proliferation directly with capital accumulation by dispossession where these migrations in most cases represent the populist desire to take advantage of the possibilities created by the capitalist mode of production in cities.

If cities are the place of capital accumulation, the place where people were forced into wage relations and became dependent on the wage and no longer able to support themselves directly through subsistence life on the commons, then it is possible to think of cities as enclosures – the opposite of the commons. So how can the city also be a place of commons formation? The theory and practice of the urban commons need to be reckoned with the historic, and contemporary, fact of the city as the site of capital accumulation and wage relations: a place largely of surplus, consumption, and exchange, and not of subsistence. To use the phrase ‘urban commons’ without recognising this history obscures the theoretical contradictions of the urban commons. If cities are made up of people thrown off the commons and where these people are then connected to wage labour, then how can the commons – a site for resisting wage labour – exist in the urban context? Is it that these thrown-together people have possibly created new forms of commons?

Another contradiction of the urban commons is its ambiguous relationship with the state. If commons are managed and regulated by the community then how would urban commons interact with the state, which exercises heightened regulation over the urban? For many scholars, the role of the modern state has been by and large to facilitate the functioning of capitalism, and cities, being the site of capital accumulation, are the product of the ongoing collaboration, and tension, between the state and capital. Therefore, ideologically the state has existed in conflict with the idea of the commons. In many ways this conflict is materialised through the distinction made between ‘public’ and ‘commons’. Bruun (2015) in this regard distinguishes two types of public property, one that is managed and owned by the state, generally known as ‘public property’ (e.g., roads,

parks, and urban open spaces), and the other, collectively owned by the society, known as the 'commons'. Gidwani and Baviskar (2011) argue that there remains rather a strong predilection on the part of the state to transform commons into state property or a capitalist commodity. Kratzwald (2015) in theorising the urban commons asserts that the notion of 'the commons' predates the idea of 'the public'. However, these scholars argue that the concept of commons could be used in the defence of urban public space and therefore to shift the term 'public' in an emancipatory direction. They don't position the commons as going in the opposite direction of the 'public' but they do insist that the commons is in conflict with the state.

Positioning the commons as at odds with the state often gives an impression that the commons can be used to absolve the state of its responsibility to care for its citizens. There are many right-wing champions, such as Aligica (2014), who are delighted by the potential of the commons to replace public and state with voluntary collective activity. However, scholars such as Mcshane (2010), through his examination of urban commons in Australia, warn that the resurgence of the commons could also serve a regressive anti-state agenda. According to him, the collective self-provisioning of the commons could in many ways send the message to the state that the 'state' isn't necessary. Therefore various movements of self-provisioning that reject state care in favour of self-help have been critiqued for letting the state off the hook. Katz and Mayer (1985) in their examination of self-help movements in Berlin and New York City argues that though these movements of the tenants and squatting groups who were taking over buildings abandoned by landlords were able to gain autonomy through self-provisioning, these movements also render quite convenient for states that are prone to be neoliberal. What these tenants and squatters were doing could be thought as seizing and maintaining the commons, and that by embracing the commons and rejecting the state, they were taking a tremendous risk, because without although state assistance the immediate needs of the commoners can be fulfilled, it would be difficult for them to be able to take collective care of themselves in the long term. Therefore, there is a dilemma between the commitment to collective self-provisioning and/or to place demands on the state. This dilemma could be resolved by seeking ways in which the state could support the commons rather than placing the commons in opposition to the state. Therefore, 'the urban' being the site for intensive contradiction and competition, provides an appropriate platform from which such dilemma could be examined.

The contradictions discussed above are inherent to urban commons and have mainly resulted from the way the urban has been conceptualised. For instance, the Marxist approach used by many proponents of the commons to theorise cities is highly capitalocentric (J. K. Gibson-Graham, 1996). By putting capitalism at the centre of the analysis such that capitalism is the only mechanism at work in cities, all the other sorts of ways that are actually at work in cities have been overlooked or interpreted as only ever supporting capitalism. Gibson-Graham, have expressed their frustration with the way many Marxists have theorised capitalism: as a unified, singular, totalising force, and one that must be fully destroyed before any new alternatives can be built. The development of the ‘diverse economies’ framework conceptually used in this research is based on such a critique, which they call “capitalocentrism”.

When we say that most economic discourse is ‘capitalocentric,’ we mean that other forms of economy (not to mention noneconomic aspects of social life) are often understood primarily with reference to capitalism: as being fundamentally the same as (or modelled upon) capitalism, or as being deficient or substandard imitations; as being opposite to capitalism; as being the complement of capitalism; as existing in capitalism’s space or orbit (1996, 6).

A capitalocentric approach, Gibson-Graham argue, obscures ways of seeing, understanding, and living in a world that are not in relation to capitalism. In capitalocentric thinking, any non-capitalist practices are theorised as something about to be commodified or as thinking in terms of commons that is about to be enclosed by the consuming monster of capitalism. And, critically, it can lead to an impoverished imagination about what is, and what could be.

On a different note, a similar argument has been made by prominent postcolonial urban scholars such as Robinson (2006, 2011) and Roy (2009, 2011), who critiqued the contemporary urban theories to be exclusively western, developed in the context of western cities and applied to various different contexts without much critical evaluation. According to them, these Euro-American urban theories have promoted a modernist and capitalist approach to understanding cities that has in many ways undermined the experiences of Global South cities to the status of backwardness, underdeveloped, and rife with struggles. The very localised, grassroots, and everyday practices of people making and remaking their cities in the Global South have largely been overlooked in

contemporary urban theories. As a result, urban planning has failed to reconcile itself with the inherent characteristics of cities of the Global South, such as informality, which is seen more as a problem in those cities. In Roy's words, "There is an urgency for urban studies and planning to move beyond the dichotomy of First World 'models' and Third World 'problems.' One possible route is through policy approaches that seek to learn from Third World cities" (Roy, 2005, pp.147). Instead post-colonial scholars have called for paying close attention to how the urban actually operates at the scale of every day rather than attempting to create an abstract unifying theory of the urban.

This capitalocentrism and near-exclusive reliance on Western theories of the urban hinder alterglobalisationists: a major limitation of the alterglobalisationist approach is a reluctance to delve into the details of how commons operate in contemporary life. These scholars theorized broadly about the need to reclaim the commons and resist enclosure, however, they offer little practical tools for exploring how urban commons operate (Huron, 2018). Apart from a few scholars such as Eizenberg (2012), who focused particularly on how community gardens functions in New York City, most of the literature of alterglobalisationist scholars is concerned more with a theoretical sense of the urban common rather than the material ways in which the commons can be used to support everyday experience (Federici, 2009; Huron, 2018). The alterglobalisationists scholars have successfully placed an argument in favour of reclaiming the commons, however, what we need now is the investigation of how urban commons actually operate on the ground.

It is through this methodology – one that pays close attention to the particulars of how commons actually work in informal settlements (if at all) – that I dive into the framework of 'diverse economies'. Developed by Gibson-Graham (2008), this framework entails a close examination of the ways people reclaim and maintain commons in the urban context – which necessarily means attending to both particular experiences and larger forces. Urban commoning is the messy, every day and necessarily compromised work of trying to build networks of survival in the midst of the high-pressure centrality of the urban. Urban commoning is not pure. It should in no way be romanticised. It is often, as will be seen in subsequent chapters, an act of desperation, and as noted here, it is marked by contradiction.

But a diverse economies perspective can help work through the contradictions of the urban commons. It can, for example, shed light on questions of access and exclusion. By widening our space of economic imagination, the diverse economies perspective shows how cities, despite being the site of capital accumulation, can also be sites of subsistence. It allows seeing all the ways people survive in cities, with or without access to waged labour. Though the city is the site of capital accumulation, it is not wholly a capitalist machine. Subsistence living can and does happen in cities, in all sorts of ways. The way commons has been theorised and practised by diverse economies scholars offers rich analytical grounds to investigate informal settlements from a commoning perspective without necessarily worrying about the dilemma of state and capital. It allows for attending to the tactics of living of the so-called ‘urban poor’ without necessarily devaluing them as subordinate. By employing a commoning framework to urban informal settlements, I intend not only to contribute to the ongoing debates of urban commons but also to disrupt the homogeneous and simplistic understanding of the informal settlements. In the next sections, therefore, I discuss the analytical framework of commons, developed under the theoretical conceptualisation of diverse economies.

2.3 Diverse Economies

Before jumping into the tools for commons analysis, it is important to provide an overview of the fundamental ideological concerns of diverse economies perspectives. The development of the concept of diverse economies by Gibson-Graham (2006, 2008) has mainly aimed to shift the ontological ground of our singular economic understanding by portraying the existing diversity in our economy. The term enables drawing the capitalist economy and all other economies that are often rendered invisible by the dominance of capitalism into the same ontological sphere. The diverse economies framework is particularly important to theories of commons as political construction, a concept highly relevant to the urban setting and particularly to informal settlements. Gibson-Graham’s theorisation of diverse economies starts with highlighting the ways in which our understanding of economy has been narrowed down to a single, dominating, capitalist form. Due to the hegemony of capitalism, it has become very difficult to think of the economy other than in terms of capitalism. This image of the economy as essentially capitalist is derived from the systematic exclusion or suppression of many other types of economic activities.

The widespread influence of the capitalist economy is no exception to this process whereby the economy has shifted from something that can be transformed or managed by society to something that governs society. In other words, representation of the economy has been dislocated from its location in discourse and has landed somewhere separate from society (J. K. Gibson-Graham, 1996). In that process, the capitalist economy has ignored many activities that are carried out in the household, neighbourhood, and community, and also at the national and global stage, which are not necessarily driven by the motive of profit maximisation but rather by that of living well. From this point of view, as the hegemony of capitalism is a discursive construction, it can be deconstructed by opening up spaces for heterogenic economic activities (J. K. Gibson-Graham, 2006, 2008). This deconstruction is what forms the fundamental basis of the diverse economy. By developing a critical approach to studying the economy as a diverse, proliferative entity, diverse economies scholarship provides the framework to study households, communities, or nations in a manner that can reflect a wider reality (Miller, 2013).

According to the diverse economies framework, economic life is composed of myriad sectors where every economic actor (individual, enterprise, or community) is engaged in a diverse range of activities simultaneously or sequentially. These actors occupy multiple sites in the diverse economy where each is to be understood as a site of negotiation and struggle. These sites offer different realms of freedom and opportunities for exploitation and oppression according to the circumstances. There are constraints and openings embodied within each site of which each economic actor is a part. A capitalist investor might be engaged with different non-capitalist activities at different sites. For example, an investor might help a friend buy food from a farmer's cooperative or grow vegetables on a rooftop. Similarly, a woman living in the slum might work as a self-employed tailor, run a small tea stall on the street corner, and also sell her labour in the capitalist garment industry. These sites are never fully determined and continue to evolve with the dynamic nature of each individual life. Thus the diverse economies framework is a way of mapping existing and potential aspects of economic lives and functions at different sites in geographical space (J. K. Gibson-Graham, 2006, 2008).

Figure 2.1 portrays the economy as an iceberg, where substantive economic practices are far more diverse than what is captured by mainstream economics (J. K. Gibson-Graham et al., 2013). The

tip of the iceberg, above the waterline, is what represents economic activities that are visible in mainstream capitalist economic analysis. Most economic accounting and national policies are influenced by this segment of the economy, with many other practices kept out of focus. Below the waterline, there is a range of economic activities, people, and places that remain invisible and hence are ignored in most policy formulation processes.

Figure 2.1: The iceberg economy



Source: (Community Economies Collective, 2017)

These invisible practices are portrayed as anything but economic activities and their importance in holding the economy together is barely taken seriously in both academic research and policy formulation. This iceberg representation is an important tool in taking an inventory of all economic practices at any level (local, regional, and national) and presents a different understanding of what constitutes the economy. This representation brings a new perspective that challenges thinking where the economy and capitalism are used interchangeably. Thus, the diverse economies framework portrays a wider perspective of the economy by enabling us to see what is hidden, what is ignored, and what is devalued (Healy, 2009). What has emerged from Gibson-Graham's work on diverse economies is known as the Community Economies Collective (CEC): a collaboration of scholars and activists around the world who have contributed to the reimagination of economies. The contributors of CEC through their ongoing research and projects have enriched the theoretical and practical understanding of diverse economies.

There are five identifiers presented by the CEC scholars in their effort to portray the diversity of economies. In line with the iceberg presented above, each of these identifiers – labour, enterprise, transaction, property, and finance – has been categorised based on different arrangements (Table 2.1). For instance, labour could be arranged as wage labour, unpaid labour, and labour that is paid in kind, termed as alternative wage labour. At the top of the iceberg in the case of labour is wage labour – what we generally mean to indicate labour. But the diverse economies framework argues that labour does not necessarily mean only wage labour and also includes other sorts of arrangements (alternative wage, unpaid) that remain under the waterline of the iceberg. By conceptualising labour in this way CEC scholars have intended not only to draw attention to the diversity of economies but also to further investigate various practices at different levels which form the building blocks of the economy that are inclusive, sensitive to the environment, and closer to society.

Table 2.1: Five identifiers of the diverse economies framework

Labour	Enterprise	Transaction	Property	Finance
Wage	Capitalist	Market	Private	Mainstream Market
Alternative Wage	Alternative Capitalist	Alternative Market	Alternative Private	Alternative Market
Unpaid	Non-capitalist	Non-market	Open Access	Non-market

Source: Gibson-Graham et al. (2013)

Similarly, property has been categorised as private (e.g., private land, house), open access (e.g., atmosphere, international waters, outer space), or alternative private (e.g., customary lands, community-managed). Though private and open access arrangements are more openly acknowledged types of property in our general understanding of economy, the diverse economies framework allows for conceptualising other arrangements, such as commons as a type of property (St. Martin, 2020). However, it is also considered that these identifiers are not complete; rather, they are flexible and able to evolve with more and more diverse practices in our daily life. Categorising each of these identifiers according to specific arrangements is itself problematic as there is much overlap among the categories and their boundaries are not clear-cut. Gibson-Graham et al. (2013) termed this framework as a kind of worksheet that can guide the researcher to identify diversity in economies.

2.4 Commons in Diverse Economies

According to Gibson-Graham et al. (2013), the notions of private, open access, and commons are not static and are not exclusively determined by the ownership of the property. They rather argued that the question of who owns a commons is open, and thus all forms of property can potentially be commons. It is the practices of inclusion and exclusion enacted by the commoners that determine how ‘open’ a particular commons is rather than the regime of property ownership. Thus commons, according to Gibson-Graham et al. (2013), encompass a socio-political dimension that both fosters and in turn is sustained by the cultivation of values and practices such as care, solidarity, mutuality, and interdependency.

In theorising commons, Gibson-Graham et al. (2013) relied on the term ‘commoning’ – a term coined and popularised by historian Peter Linebaugh (2008) as the social practices of constant negotiation by the commoners around the terms of access to the resource(s) that they hold in common. Therefore, the commons are based on the construction of ‘common interests’ by the commoners and are enabled and reproduced through the practices of commoning. The understanding of commons is thus not limited to property relations but can also include practices or knowledge that are shared and cared for by the community collectively. Gibson-Graham’s understanding of community in this context, as Dombroski, Diprose, and Boles (2019) have seen, is not based on an individual’s self-identification with a community or the sameness that he or she might possess with others; rather these scholars perceive community as something that forms on the basis of what Nancy (1991) has called “being in common” or “being with”. In a similar vein, Gudeman (2001) established the relation between community and commons saying that it is the commons that not only creates but also maintains the community. His famous saying “Without a commons, there is no community; without a community, there is no commons” actually reaffirms the importance of both commons and community in their respective conceptualisation (Gudeman 2001, 27). Therefore, for Gibson-Graham and community economies scholars, commoning is a performative politics used as a verb that enables property (and also practices or knowledge) to be moved from public and private arrangements in the direction of commons.

Figure 2.2 presented below presents the ‘identikit’ developed by Gibson-Graham et al. (2013). This identikit provides a tool to identify commons based on the ways in which the access, use, benefit, care, and responsibility around the commons are being enacted. This identification is based on the constitutive everyday practices of commoning that shape the relationships between the commoners and the commons around the key five aspects mentioned. Irrespective of the ownership of a particular property, commoning could be practised by the commoners in order to common the property. What is important here is paying attention to those practices that are negotiated by the community towards sharing and widening the access, use, benefit, care, and responsibility that gradually moves a resource towards commons. Commons are dynamic rather than static as these key five aspects of commons keep changing over space and time. Using these five aspects it is possible to examine the various degrees of commoning associated with the resource. If access to the resource is highly limited, the use of the resource is granted only to individuals, the benefit of

the resource is realised only by the individuals, the care for the resource is performed by individuals, and the responsibility is assumed by individuals then the resource is more inclined towards the private property type.

One important aspect of this identikit is that it does not necessarily distinguish private, open, and commons solely based on ownership type. It emphasises key elements – use, access, benefit, care, and responsibility – associated with the resource to be the important determinant of the resource, whether it be private, open, or common. It allows for understanding and seeing the diverse social, economic, and ecological relations that contribute to the sustainability of the commons. There is evidence around the world of commoning being practised despite the resource not being under the ownership of the community. For instance, Hill (2011) highlighted how underused private properties in Mindanao, Philippines have been used as community gardens. Dombroski, Diprose, and Boles (2019), too, have examined the temporary nature of commons in New Zealand by looking at various transitional projects that have taken place in post-earthquake Christchurch, at sites that are owned by the city council. These scholars have suggested that it is the commoning practices that determine commons, irrespective of the ownership of the resources. This is not to say that ownership in the context of commons is not important. Rather the way commons has been theorised by Gibson-Graham implies that ownership is only important to the extent that it facilitates the practices of commoning. For the long-term sustainability of practising commons, common ownership may often be the most effective element (Dombroski et al., 2019). So commons is not just another type of ownership in between public and private; rather, as theorised by Gibson-Graham, it is through the negotiation of use, access, benefit, care, and responsibility that commons are produced and reproduced by the community. Such a conceptualisation is very different from what institutionalists have conceptualised as commons. It allows for examining the degrees at which commoning is practised by a community over any resource.

By using this identikit developed by Gibson-Graham, I explore the extent to which the informal settlements may be understood as commons that are socially constructed by means of ongoing commoning practices. If informal settlements can be conceptualised as commons, that would be very different than the hegemonic and capitalist understanding of informal settlements. Reimagining informal settlements beyond a homogeneous urban space characterised by the

problems of tenure security would help to develop new approaches to informal settlements that are not exploitative and rather more respectful towards the practices of the people living in these settlements. An analysis of informal settlements involving negotiations over their access, use, benefit, care, and responsibility challenges the overreliance on defining informal settlements as physical sites of poor housing conditions and misery. Instead, a focus on practices of commoning reveals the productive nature of urban informal settlements understood as dynamic and heterogeneous urban commons.

Figure 2.2: The Commons Identikit

WAYS OF COMMONING						
	ACCESS	USE	BENEFIT	CARE	RESPONSIBILITY	OWNERSHIP
Commoning enclosed property → Creating new commons → Commoning unmanaged open-access resources	Narrow	Restricted by owner	Private	Performed by owner or employee	Assumed by owner	Private individual Private collective State
	Shared and wide	Negotiated by a community	Widely distributed to community and beyond	Performed by community members	Assumed by community	Private individual Private collective State Open access
	Unrestricted	Open and unregulated	Finders, keepers	None	None	Open access State

Source: Adapted from Gibson-Graham et al. (2013)

Whereas the diverse economies approach offers a practical tool for analysing the sociality of commons, the available tools for analysing the spatiality of commons remain largely limited. It is interesting to note that there are differences in the way the spatiality of commons are conceptualised by the institutionalists and alterglobalisationists approach to commons. The way spatialities appear in the works of both institutionalist and alterglobalisationist scholars is as the notion of boundary. The institutionalists are very clear that the commons are a closed system, having clearly defined boundaries. For them, commons are only open to members. However, alterglobalisationists perceive boundary in some sort of abstract terms. They theorise commons at a very large scale and often see commons as open to all. For instance, Shiva (2013, x) writes, “In

the commons, no one can be excluded". Therefore, it is difficult to analyse the spatiality of commons from the perspective of alterglobalisationists scholars. Apart from few examples such as the urban sea commons by Armiero (2011) or the case of the urban community garden by Eizenberg (2012), most of the alterglobalisationists talk about boundaries from a very vague and idealistic perspective. In the next section, I would discuss the spatiality of commons in more detail as I deem this significantly important to disrupt the existing predominant image of the slum. If we want to reimagine urban informal settlements beyond the notion of 'despair', 'poverty' and 'crime', we need to foreground the heterogeneity exhibited in the space of urban informal settlements.

2.5 Spatiality of Commons

Urban commons are fundamentally socio-spatial as the urban context brings together both social and spatial considerations. The ways in which the size, scale, density, and diversity of the urban is manifested into its physical form give relevance to urban commons. Therefore, urban commons have spatial as well as social dimensions (Harvey, 2012; Katrini, 2018). To understand spatiality in the context of the urban, it is a good idea to start with Lefebvre's multi-faceted concept of space: the abstract mental construction of space, the production of physical space, and the experience of living in and through space (Lefebvre, 1991). In relation to urban commons, these types could be recognised simultaneously as being spatially perceived in the minds of commoners, physically conceived through collective action and experienced through everyday occurrences (Felstead, Thwaites, & Simpson, 2019). As a result, urban commons are the intertwined product of the city as a way of life and its physical form, simultaneously produced by the commoners (Huron, 2018; Soja, 2003). The understanding of urban commons is not limited to the physical form of the common deriving from the collective actions nor should be limited to the social organization deriving from the physical configuration. Urban commons rather emerge from the intertwined relationship between both, known as socio-spatial manifestation (Soja, 2003).

The way we can look further into the linkage between social and spatial consideration of commons is through the notion of territory. The idea of territory is highly relevant to urban commons as it involves the socio-spatial expression of the shared sense of belongings by the commoners. A territory could be thought as a form of social control expressed in spatial terms. It is not only an

area within a set of physical limits but also social scope demarking who is allowed within the space and what norms are expected within it. Territory differs from legal ownership/right in that it portrays a perceived sense of belonging to a space (Habraken, 1998).

A territorial awareness is what distinguishes what is ‘mine’, what someone else’s is and what is shared or ‘ours’. In this perceived sense of shared belongings, ‘ours’ delineates a space controlled by a group of people of which an individual feels they belong. ‘Ours’ therefore represents a terrain requiring cooperation and co-existence along with a consciousness of ‘others’ (Thwaites, Mathers, & Simkins, 2013). What we mean by the spatiality of commons is the way in which ‘ours’ is spatially defined or expressed. Such expressions for urban commons may involve appropriating spatial configurations that enable a sense of ‘ours’ to be expressed more readily. From urban commons point of view, it is the close proximity of ‘ours’ to ‘mine’ that ensures a shared belonging to the space of the common. By appropriating the key factors such as access, benefit, use, care, and responsibility of the commons, the commoners create a balance between expressing self-identity in ‘mine’, settling the differences in ‘ours’. A similar relationship, thereby, exists between spaces as a form of ‘ours’ versus spaces as ‘others’.

The thresholds that define the edges of shared territories are important in defining what kind of relationship urban commons have with adjacent territories. These thresholds are usually expressed through the notion of boundary (e.g., physical border, symbolic representation or landmarks, and so on). The boundary of the commons is the spatial expression of the relationship between the commoners and the common and therefore could be different than the legal boundaries. It is strongly related to commoners’ awareness of themselves and position within the wider society. It is through creating, imposing, maintaining, or appropriating these boundaries that commoners can manifest their common mindset, rules, and norms.

Despite the importance of territoriality in the study of commons, it is surprising to notice that the notion of spatiality has largely been overlooked within the scholarly debates on commons. The mention of terms such as space, place, territory, or scale remain rare in commons literature (Moss, 2014). Most of the studies on commons profoundly discuss the sociality of commons whereas little attention has been paid to investigate the spatiality of commons and what it means for the ways commons are created, maintained, used, or abused. While the importance of space and place has

been mentioned in many commons studies, very few have given attention to the critical aspects of the spatiality of the commons. Space in commons research has been conceptualised as a background object instead of being the subject of systematic scrutiny. Though scholars such as Mark Giordano (2003) have argued that the commons problem is fundamentally related to the relationships between the spatial domains of resources and resource users, spatiality in commons analysis has been used implicitly without paying attention to the constructive nature of space. Space in contemporary commons research has been treated as the site of collective action, rather than being considered as an active agent of enabling or disabling commoning.

However, the idea of boundary is addressed in several ways within the common literature. Firstly, in the ‘tragedy of commons’, the boundless grazing field is conceptualised to be in danger of exploitation. Then Ostrom established the first rule for CPR being to have clearly defined boundaries. These references suggest the need for defined territorial boundaries surrounding spatial shared resources. Institutional scholar, therefore, think of commons to have a rigid boundary so that the matter of inclusion and exclusion from the commons become clear. This conceptualisation of boundary, even though helpful for the theorisation of CPR, is problematic when it comes to urban commons (Huron, 2018). In urban commons, the boundary is not necessarily static and clearly definable but often blurry and can significantly change over time (e.g., squatting). Moreover, boundaries in urban common literature are often considered as a form of enclosure associated with privatisation and commodification. Alterglobalisationists, therefore, advocate for the removal of physical barriers and restrictive thresholds. Some alterglobalisationists, however, suggest that not all forms of enclosures are negative and instead they can be necessary for the protection of certain types of shared resources in the complex, often competitive and contested nature of the city (Felstead et al., 2019; Lee & Webster, 2006; Stavrides, 2016).

It is challenging to balance between the openness and enclosure within urban commons. It is not a straightforward job to determine the limit of the territorial awareness of the commoners. It is largely because the edges of the territories are not necessarily sharp but fuzzy. They are not necessarily expressed exclusively through the notion of a fixed physical boundary but could be expressed through symbolic representation. More importantly, a static physical boundary might

not be a proper representation of how commoning is manifested spatially. If we are to shift our views of commons from an ‘object’ that is waiting to be appropriated by the commoners to something that is socially produced through ‘commoning’, then we need to investigate the impact of commoning within the physical boundary. How is space organised or territoriality is negotiated? We need to restrain ourselves from assuming that the act of commoning is evenly distributed across the common. Some parts of the common may exhibit more commoning compared to other parts, creating intra-common spaces of opportunities and struggles. We also need to assess the role played by space itself in shaping the commoning practices. In general, there is a lack of studies that have investigated the way commoning and space are constituted by each other (Moss, 2014).

Informal settlements provide an excellent opportunity to seek these answers by combining the sociality and spatiality of commons. With Gibson-Graham’s tool in mind, I seek to answer this question by adopting a technique called ‘Space-syntax’, which will be discussed in the following section. The theoretical proposition of Space-syntax integrates human activity and its spatial form, which allows me to analyse the intertwined relationship between commoning practices and their spatial manifestation.

2.6 An overview of Space-syntax

Space-syntax is a theoretical and practical technique used to investigate the interrelationship between built environment and social functions. This technique was originated about 35 years ago in the work of Bill Hillier and Julienne Hanson (1984), under the domain of architectural and urban design. At the core of the Space-syntax approach is the understanding that the organization of our social life, to a great extent, is influenced by the topological configuration of the environment. By analyzing this spatial configuration using various computational techniques, it is possible to explain some social phenomenon, such as social interactions, congregations, encounters, and movements. Space-syntax offers a set of techniques inspired from graph theory that can be applied on various spatial scales such as regions, cities, neighbourhood, and even individual building.

The starting point for Space-syntax is the observation that space is fundamentally the common ground between the morphological aspects of the city (a large agglomeration of buildings connected by space) and the social aspects of the city (a complex system of human activity linked

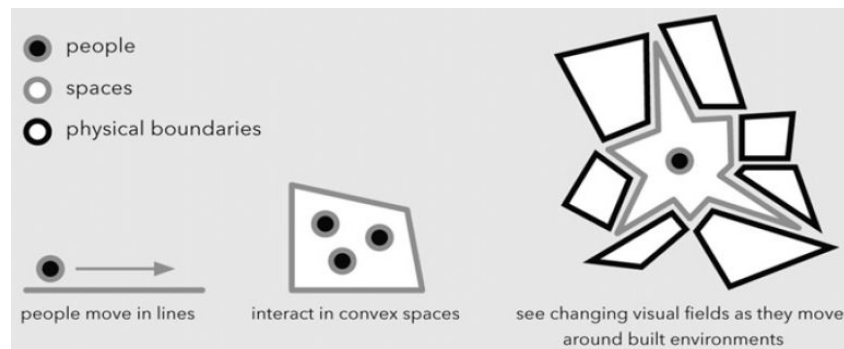
by interaction). Where classical urban theories have mostly taken asymmetrical views of these two aspects by foregrounding one and backgrounding the other, Space-syntax denies the conceptual separation of space as container from society as content (Hillier & Hanson, 1984, p. 9). Space-syntax strictly opposes the idea that the relationship between society and space is merely that of mapping one domain onto the other and rather argues that these two aspects are dynamic and each has the capability to modify and restructure the other. Space-syntax begins with the understanding that human societies use space as a key and necessary resource in organizing themselves.

2.6.1 The underlying theoretical propositions of Space-syntax

There are two fundamental propositions that Space-syntax endorses. The first one is that space is intimately linked to human activity, not just as a background of the activity but intrinsic to it. Space is an essential aspect of any human activity that is performed by moving through space, interacting with others in space or just occupying a point in space. Each type of activity has its own natural spatial geometry and indicates some aspects of how space is being used or experienced. For instance, movement from one point to another is fundamentally linear and one-dimensional. This action leaves linear trace on the space while navigating towards a destination (Figure 2.3). On the other hand, interaction is fundamentally two-dimensional and requires a convex space in which all points can see all others. It requires all participants to be inter-visible and co-occupy a space in a way that all the points can be interconnected without going outside the space. When we occupy a point in space, our ability to encounter others is largely shaped by what we are able to see in space, a variably shaped, often spiky, visual field we call an isovist (Benedikt, 1979; Vaughan, 2007). Isovist is therefore a field of view which is made up by the combination of lines radiated to all direction from a point (until they strike a boundary) and a largest convex element (area) in which all the points can be seen.

Looking at cities with this view in mind, we can find linearity in the way the streets, avenues, alleyways are spatially organized with occasional convex elements, such as squares and public open spaces which are the centre of variable isovists. This intertwined aspect of spatial form and function is in contrast with seeing space as the background to human activity. Therefore, according to the first proposition, space is designed to reflect the direct interaction between the spatial form and its functions.

Figure 2.3: Geometry of human movements



There are various geometric forms associated with human activities. For instance, movement from one point to another is fundamentally linear (one dimensional), whereas interaction among people forms convex hulls (two dimensional). Our visual fields are also changed while we navigate around the built-environment. Source: Hillier, 2014

The second proposition is that space is fundamentally a configurational entity. The configuration of space is derived from the act of transforming continuous space into a connected set of discrete units while using and appropriating the space by the inhabitants. The spatial configuration is therefore understood as the system of interrelated relationship between those discrete spatial units that make up the entire city or neighbourhood. Transforming continuous space into such discrete configurations enables labelling different parts of the space, corresponding to different uses by different social groups. Different rules of behaviour and convention engage with different parts of the space, which associates various symbolic meanings (e.g., social, cultural) to those discrete spatial units. Space-syntax involves recognizing the spatial configuration of the built form of the parts that are in unique relation to one another. It is possible through the techniques of Space-syntax to illustrate different configurational properties of spaces which often may appear similar but possess different properties. The term spatial configuration in Space-syntax context doesn't refer to the parts of the system, rather it refers to the whole system in which the parts are connected to each other in relational term (Greene, 2003). Space is not only the characteristics of spaces separately taken but also the relationship between the different spaces that make up a whole city (Mahmoud & Omar, 2015).

These two propositions lead to understanding that certain spatial components within the entire configuration will offer a higher potential for social activities, such as movements or encountering others, whereas some spatial components will offer higher degree of privacy. The spatial

configuration and consequent potentials for social interaction can also be altered by human interventions. Such alteration, for instance, can be found in the activity of creating or readjusting boundaries of the configured space. The demarcation of boundaries or enclosure of spatial units reorient accessibility throughout the spaces. This reorientation, in turn, shapes the pattern of movement and potentials of encountering others. The effect of re-appropriating the boundary is therefore as much as spatial as it is social. Different members of the society exploit these potentials offered by the spatial configuration of spaces at various degree which in turn potentially generate various degree of control, responsibility, division of labour, and hierarchy among the members of the society.

2.6.2 Space-syntax is not a deterministic approach

Such understanding may provoke one to assume that a particular spatial configuration leads to a certain social structure to be mapped onto it. But space syntax, by no means, should be thought of as a deterministic approach as it provides no affirmation that the power of a specific spatial configuration produces a certain type of behaviour. Space-syntax suggests that a spatial configuration provides a potential field of encounter where social action can and is likely to take place. But the actual level of social actions such as movements could be the result of many socio-economic variables, other than just the spatial configuration of the space. Hillier argued that the movement pattern, however, is correlated with the spatial configuration (i.e., the way each street is integrated to all the other streets in the system). Urban streets, for example, limit the extent of human movements. Humans must move along the streets, which form the complex configuration of the urban street network. Similar observations can be made of other urban spaces that channel people's movements. By this argument, Hillier didn't deny the correlation between movement pattern and socio-economic variables but highlighted that spatial configuration plays a significant role to shape the movement pattern which traditionally has been overlooked in urban design theories. Application of Space-syntax in various urban contexts has suggested that the busiest shopping streets in the city are also the most integrated streets in the whole road network system.

To analyse the relationship between the configuration of space and human movement, Hillier describes the urban environment as a system of spaces, connected to each other in relational terms. Therefore, the main idea of Space-syntax is that the use and understanding of spaces functions are

influenced by the relationships between spaces. Space-syntax is based on space affecting the behaviour that unfolds there. Space-syntax develops strategies of description for configured spaces in such a way that their underlying social logic can be enunciated. That may often lead to the development of practical explanations regarding the effects of spatial configuration on various social or cultural variables. But most often Space-syntax is about special configurations affecting the social behaviour that unfolds there. Space-syntax offers various quantitative tools to measure the spatial configuration which would be discussed along with the findings in Chapter Five.

There are two main reasons for adopting the Space-syntax approach in my research. First, its theoretical prepositions resonate with the overarching theoretical aspects of urban commons as a social construct. Space-syntax not only considers the constructive aspect but also endorses the agentive nature of space. It considers that space is made and remade by human activities and consequently can also shape or influence human activities that unfold at various spaces. Secondly, Space-syntax provides the tools to analyse micro-level spatial dynamics. Considering space as a collection of micro spaces allows me to read the spatial configuration of urban commons resulting from the commoning practices of the commoners. As I am interested in foregrounding the spatiality of commons, it is important to investigate the variation of commoning practices according to the spatial character of the commons. By reading the relationship between spatial configuration and commoning practices, Space-syntax allows me to identify the space of opportunities as well as the spaces of struggles. Therefore, by adopting Space-syntax I foreground the spatialities of the lived experience of the people and disrupt the simplified and homogenous narratives about the space of urban informal settlements.

2.7 Conclusion

In this chapter, I have explored the commons framework for developing a fine-grained conceptualisation of the urban informal settlements. The concept of commons, despite being successfully applied in various aspects of urban spaces, has not been examined in the context of urban informal settlements. At a time when urban informal settlements are at the forefront of neoliberal expansion through their enclosure, displacement, and clearance in the name of urban renewal and urban development, it is interesting to see how commons are constructed and reconstructed every day and how commoning is performed. Exploring urban informal settlements

through commons enables an understanding of the socio-spatial process of construction. Therefore, my discussion of commons has been mainly focused on two fronts: social aspects of commons and the spatial aspects of commons.

To dive deeper into the social aspects of commons, I have discussed the two major approaches to commons: institutionalists and alterglobalisationists. By exploring the ways in which commons are conceptualised in these two approaches, I have highlighted the major characteristics of commons and their relevance in the context of urban informal settlements. I have explicitly explored the concept of urban commons and its inherent character, such as questions of contestation, reclaiming the space, and neoliberalism. These topics are closely related to the discussion of informal settlements. I have also highlighted the major limitations associated with these major approaches to commons. With a lack of practical tool offered by urban commons framework, I moved to the discussion of diverse economies.

I discussed in this chapter the rationale for adopting the commons analysis tool proposed by Gibson-Graham and the Community Economies Collectives (CEC) which can potentially be applied in urban contexts. The tool they proposed works around five key aspects – access, use, benefit, care, and responsibility – in order to identify commons. Their theorisation of commons from the broader perspective of diverse economies is flexible enough to capture the heterogeneity and dynamism exhibited in informal settlements of Global South cities. Their argument that any form of property (e.g., private, public, semi-public) could be commons and that the commoning depends on how the community members negotiate those five key aspects provides a powerful basis for investigating everyday politics in informal settlements. It frees commons from being just another form of ownership type and integrates socio-political struggles within its analytical framework.

To explore the spatial aspects of commons, I have adopted the Space-syntax approach and discussed in detail what is meant by the spatiality of commons. In general, commons scholars remain silent when it comes to examining the spatialities of the commons, as I have briefly mentioned in this chapter. Despite the relevance of territory, scale, size, and boundary in the discussion of commons, these aspects have been rarely taken up by contemporary researchers at a sophisticated level. In this research, I intend to bridge this gap by showing the extent to which the

spatialities of the common along with its socialities, can enrich our understanding of informal settlements. Chapter Five of this research presents spatial aspects of the study area deriving from such integration. By applying the Space-syntax method on the case study slum in Dhaka, I show a spatial variation in commoning that challenges the conventional notion of a singular commons. This spatial analysis is also intended to uncover the heterogeneity exhibited in the dynamic space of urban informal settlements.

In the next chapter, I discuss the methodology adopted in this research. More specifically, I focus on the philosophical underpinning that has shaped the data collection and analysis process. This research adopted a mixed method approach of data collection and analysis to investigate the social and spatial characteristics of commons which are broadly discussed in the next chapter before detail analysis of these characteristics in the following chapters.

Chapter 3 : Methodology

3.1 Introduction

While informal settlements occur all over the world, their diversity precludes us from making too many general claims. Indeed, situating our understandings of informal settlements in rich empirical research is the underlying methodological commitment I make in this research. Any methodology for studying slums must work hard to avoid both victimization and romanticisation of the slum and the slum dwellers. I have approached this through the research design that deliberately seeks to *learn from* the social practices of the slum dwellers, as they operate within a spatial setting. In that context, this chapter provides valuable insights regarding my position with respect to the slum and the slum dwellers, pushing against the socially constructed image of slum as a place only of poverty and everyday struggle. This chapter traces my journey to design a research project that was both open to flexible learning and empirically reliable.

Research methodology is about the principles that guide the research process in order to generate valid and reliable research results. In other words, it is a set of procedures that are used to develop or test a theory. It can also be framed as the means by which data are generated and analysed (Hubbard, Kitchin, Bartley, & Fuller, 2002). The methodology, therefore, explains why certain methods or tools are being used in the research. This choice of the method needs to be consistent with the overall philosophical stance of the research. According to Tuli (2010:99),

The selection of research methodology depends on the paradigm that guides the research activity, more specifically, beliefs about that nature of reality and humanity (ontology), the theory of knowledge that informs the research (epistemology), and how that knowledge may be gained (methodology).

Methodology thus reflects deeper paradigm shifts and philosophical underpinnings of the research process, as well as tangible research guidelines, procedures, and practices. Therefore, it is important to clarify the philosophical stance underpinning the research before choosing a particular method of data collection.

By highlighting the overarching philosophical stand of this research, the purpose of this chapter is to outline the research approach. This has been done into three following sections. Section 3.2 describes the ontological and epistemological ground of this research along with the qualitative and quantitative methods that have been adopted for data collection in the field. In section 3.3, I focus on the research process by detailing the fieldwork and data analysis. Lastly, section 3.4 elaborates the ethical, logistical, and methodological limitations of the research.

3.2 Research Approach

There are many schools of thought or research paradigms that take different perspectives on how knowledge is produced. These research paradigms correspond to the basic belief system or worldview that guides the researchers, not only in the choice of the method but ontologically and epistemologically. As Guba (1990) argued, a research paradigm can be characterised through its ontology (what is possible to know; what is reality), epistemology (how knowledge is known), and methodology (how to go about finding the knowledge). Different schools of thought take different stands on these questions, but broadly they can be divided into two major categories: the *scientific* approach and the *situated* approach (Hubbard et al., 2002).

The scientific (also called quantitative, positivist, post-positivist, or empirical science) approach to knowledge production is that it is a rational, objective, and neutral pursuit. This approach perceives objective truth as existing and waiting to be discovered, and it is the role of the researcher to gather data and analyse it using a bias-free procedure. This approach relies on a deterministic point of view whereby the causes determine the effects. The phenomenon under investigation should be isolated to find the element of reality, and observations have to be repeated to form generalities and establish relationships among the variables. The researcher and the informant are seen as separate from each other in this approach.

In contrast, the situated approach challenges the scientific account of knowledge (D. Haraway, 1988), claiming that knowledge is just not out there waiting to be discovered but rather is subjective, made by actors, and situated within a particular context. As such, knowledge is neither objective nor neutral: it is constructed, partial, and positioned. The work of Donna Haraway (1992) is influential in this regard. She argued that all forms of research are influenced by personal beliefs

and shaped by the individual relationships between the researcher and the researched. With growing contributions from different researchers to the study of how knowledge is produced, many other approaches were developed, such as constructivism, postmodernism, pragmatism, and critical realism. Although there is a fundamental consensus among these approaches regarding the subjectivity of knowledge, they remain substantially distinct from one another. For instance, where constructivism aims to make sense of individual meaning in order to identify patterns (inductively) in a particular phenomenon, postmodernism emphasises the role of race, gender, and class in the creation of hierarchies, power, and control and multiple perspectives. Focusing on the outcome, pragmatism allows the researcher to choose whatever method (or methods) are appropriate to understanding the phenomenon, while critical theory is concerned with empowering people to transcend the constraints placed on them by race, class, and power. Overall, it is post-positivism and constructivism that dominates most social science research (Ashiq-Ur-Rahman, 2012; Creswell, 2014; Prowse, 2008).

Another approach, critical realism, attempts to overcome the dualism of positivism and constructivism by incorporating both approaches in social science research. The underpinning philosophy of critical realism is that reality exists, and it can only be possible to describe it by developing theoretical frameworks. Despite accepting that there is one “real” world, critical realism argues that the researcher neither has immediate access to it nor is able to observe every aspect of it. This approach questions how and why a particular phenomenon came into being by explaining relationships between experiences, events, and mechanisms. It is believed that while generalisable claims are possible to make, the subjectivities of individuals need to be considered in social science research. In other words, critical realism views reality as complex and recognises the role of both agency and structural factors in influencing human behaviour (Prowse 2008; Creswell 2013).

The philosophical stance of the present research is aligned with the assumptions of critical realism. This thesis recognises the agency of individuals within and through commoning, but also the context within which these groups shape (and are shaped by) broader structural processes, i.e., identity, urban governance, and political economy. In other words, individual choices are enabled or constrained by characteristics of the context in which the individual is located. This approach,

underpinned by critical realism, recognises the world as an external ‘reality’, through which broader structures mediate knowledge and experience, allowing for greater theoretical and pragmatic flexibility. As noted by Crossley (2002: 175) “agents act, think, reflect, desire, perceive and make sense...but they always do so by way of habits inherited from the social locations in which they have socialised, which are in turn shaped by wider dynamics of the social world”.

The adoption of critical realism in this research has also facilitated the process of incorporating the spatial perspective of commoning. Space has traditionally (in the scientific approach) been considered more abstract and defined as a boundless, empty, three-dimensional abstraction within which existed a set of interrelated events or objects. Critical realism challenges such a perspective of space, because critical realism believes in the existence of reality independent of our thoughts about it, while also emphasising that it is not possible to acquire an infallible understanding of the reality. Therefore, our understanding of reality is always constructed and situated in the context. This belief aligns with the critical understanding of space put forward by human geographers such as Soja (1980), Massey (1991; 2005), and Lefebvre (1991), who stressed the socially constructed and subjective nature of space, describing space and the social as integrated and as occurring simultaneously rather than treating space as an objective geometric container of human activity. It is now widely accepted among human geographers that space is a social product where all aspects of life – economic, political, and cultural – are negotiated through power relations.

In this research, I look at space as an encompassing construct which is pre-eminently social, produced by bodies and groups of people as well as by historical and political forces. I also acknowledge the agency of space by understanding that space can also influence the way our society functions. Because much as the structures of spaces influence what people do in them, these spaces are in turn influenced by people’s activities and agency. This intertwined relationship disrupts the conception of space as a static and fixed attribute and enables reimagining space as always “becoming”, never “finished” (Pred, 1984). Thus, space is formed ceaselessly through the creation and utilisation of a physical setting. Seeing space in the context of commoning provides a way of reframing slum dwellers as agents, acting within the constraints of existing structures, but also embodying the possibility of resistance to and even disruption of these structures through incremental change, echoing Bayat's (2000) suggestion of ‘quiet encroachment’.

The idea that space is produced by the activities of its users is highly evident in informal settlements where people shape their living environment through performing different activities. Bringing the spatial perspective of commoning enables the recognition of the efforts that go into the shaping of their space, which otherwise remains unnoticed and devalued. It allows us to focus on the activities performed by the people who use these spaces and to view urban informal settlements as creative, dynamic spaces. Moreover, the evolving nature of space accords with the aspiration of the people living in these informal settlements that their neighbourhood will eventually enjoy civic services, proper recognition, and full status within the city through ‘consolidation’. This is not necessarily an end goal of a static space but drives those commoning efforts to continually improving their living situations with the ongoing possibility of change.

Another key feature of critical realism is the understanding that knowledge is transitive. It means that our understanding of a phenomenon is not universal but can change from context to context and over time. Though entities exist independent of our ability to perceive and conceive, our knowledge of the entities can never be infallible. Therefore, our understanding of a phenomenon is open to challenge and subject to change. A careful consideration of the aims and objectives of this research reveals that by foregrounding the agency of daily activities through the lens of commoning, I intend to deconstruct our pervasive understandings and assumptions about urban informal settlements. My own experience and understanding of the local context and the existing secondary material and literature, alongside the subjective socio-spatial experience of the respondents, will contribute to the production of knowledge about urban informal settlements. The new insights gained from a commons perspective challenges the prevailing hegemonic knowledge about slums but also remain open to be challenged by other forms of knowledge. These assumptions are a clear indication of this research’s affiliation with critical realism. Following the critical realism paradigm of knowledge production, this research adopts both qualitative and quantitative approaches to data collection, which is discussed in the following section.

3.2.1 Methods of Data Collection

The overarching methodological approach in this research is that of the case study. Case studies can be used to “retain the holistic and meaningful characteristics of real-life events, such as small group behaviour” (Yin 2009:4), and position the practices of these groups within the wider

historical, institutional, and political context in which they take place (Flyvbjerg, 2006). According to Yin, case study is an ideal method of data collection when it comes to exploring ‘how’ and/or ‘why’ types of questions. Flyvbjerg (2006) highlighted the importance of case study as not only a method of inquiry but also a significant learning tool for researchers:

concrete, context-dependent experience is central ... in developing the skills needed to do good research (Flyvbjerg, 2006: 224)

Whether to investigate multiple cases or a single case is an important decision to make during the design of a case-study based research project. There are advantages and disadvantages in both approaches. Investigating multiple cases usually offers the opportunity to compare one case with the other, therefore provides contrast between cases. However, this approach would also mean for researcher to be familiar with more than one site; involving large number of interviews and workshops to be carried out. The resource requirement for conducting multiple case studies are beyond the capacity of this research. There is also an inevitable trade-off between breadth and depth. My aim here is to explore the rich experience of the participants where some depth could be attained by establishing relationship between me as a researcher and the participants. With this in mind, I decided to carry out a single, embedded case study in one location. Kalyanpur slum in Dhaka, Bangladesh is used as an overarching ‘illustrative case’ (Flyvbjerg, 2006), in this research as little is known about how residents of Kalyanpur slum transform their space into a commons against all the threat of fire and eviction and the extent to which the knowledge about this transformation can challenge some of the presumptions about slum and its people.

In order to answer the overarching research question, this research deems both qualitative and quantitative methods as appropriate. Given my focus in this research on the social and spatial aspects of commoning, I found a mixed method approach beneficial in the purpose of diving deeper to the rich experiences of the respondents as well as visually representing their experiences on space. In addition to that, a mixed method approach is also benefited by the ability of exploring, validating, triangulating data collected from different sources. Therefore, various qualitative and quantitative methods have been adopted to answer the research questions. The overarching question that this research seeks to answer is whether we can think of the informal settlement as a commons and if so, then how can that help us to challenge our preconceived ideas about informal

settlements? This main question has been categorised into three specific research questions which are already presented in chapter one. However, for the convenience of the readers, those questions have been outlined below:

1. What type of space is Kalyanpur slum? Or what is Kalyanpur slum?
2. If Kalyanpur slum is theorized as a commons, then what are the social and spatial characteristics of this commons?
3. How does an understanding of Kalyanpur slum as a commons help us to enrich our existing conceptualization of informal settlements?

3.2.2 Qualitative and quantitative methods of data collection

To answer the questions outlined above, I adopted a mix of both qualitative and quantitative techniques (i.e., semi-structured interview, field observation, and GPS Tracking) for data collection. While the quantitative approach has been used just to extract locational information about the commoning practices of the slum dwellers, it is the qualitative approach that has been my main instrument to interact with the respondents throughout this research. Whilst an overall quantitative approach to answer those research questions would have been ideal if I was interested to know about the scale of commoning in the slum, in this research, I am primarily interested in understanding the process through which a contested space like slum is turned into a commons. By using the commoning framework developed by community economies scholars, I am interested to see how the access, benefit, use, care, and responsibility about the slum are nurtured, maintained, and performed by the slum dwellers. This requires in-depth understanding of their daily activities as individuals and as groups. Qualitative methodology such as semi-structured interview and field observations were therefore preferred for data collection and analysis to answer these research questions.

Broadly speaking, qualitative methodology is based on flexible and sensitive methods of data generation, which involves understandings of complexity, detail, and context (Creswell, 2014). Qualitative research normally requires the researcher's long-term immersion in the field, engaging in a reflective process of data collection and analysis (Mayoux, 2006). Qualitative research methods also have a comparative advantage in identifying multiple processes or events that have influenced an outcome, rather than quantitative methods which tend to subscribe events as

outcomes of a single process or event (Tarrow, 1995). As sources of evidence, semi-structured interviews, direct observation, and secondary data have been used in this study. The following elaborates on each approach in greater depth.

Semi-structured Interview:

My fieldwork at Kalyanpur slum began on the premise that to understand the commoning process in the slum, I needed to first and foremost learn about various stakeholders and their power structure such as between owner-tenant, insider-outsider, CBO leaders-political patrons, and so on. Whilst the complexity of such dense power structure would take more than five months of fieldwork to unpack, semi-structured interviews helped to expose the deeper norms and practices associated with collective survival, struggle, and initiatives. The benefit of interview method is the ability of the researcher to engage with the participants in a deeper and meaningful way (Feilzer, 2010). In that process the researcher not only collect data from the participants but also learn from the thoughts and feelings expressed by the respondents about their place. One major problem associated with interview method is the potential for bias. Especially the way in which the questions are structured and posed may lead to confirmation of the interviewer's prejudices or opinions. There can be other problems such as the tendency of the interviewees to please the interviewer by giving the answer that they think are wanted. Moreover, interview method could often be time consuming, given the amount of effort needed to translate and transcribe the interview materials.

However, steps can be taken to reduce the impact of the problems by a good research design. Although these problems cannot be totally eliminated but a prior knowledge of the study area can help the researcher to design an appropriate interview strategy. In this research, I developed the semi-structured questionnaire after reviewing relevant secondary materials and from my previous experience of working with marginalised communities in Bangladesh². Things such as the local culture, language, and sensitivity of the topic have been considered in the formulation of the questions. Then a series of individual interviews were conducted at the household level.

² From 2010 to 2015, I engaged myself with various landless communities in Bangladesh to facilitate local, national and international campaign to promote land rights.

Field Observation

Field observation is another way of gathering data by watching people, event or noting the physical characteristics of the natural settings. It is one of the oldest and most fundamental approaches in qualitative research. This approach involves collecting data using one's senses, especially looking and listening in a "systematic and meaningful way" (McKechnie, 2008, p.573). Similarly, Adler and Adler (1994) characterized observations as the "fundamental base of all research methods" in the social and behavioural sciences (p. 389). In this research, I used this method to observe various places within the slum. The Bazaar, the main arteries, the public spaces, the alleyways, the open spaces, the tea stalls, and so on have been the subject of my field observation. I have spent considerable time at various spaces in the slum to observe what happens at those places. My intention was to understand the events that unfold at those places within and around the slum. I intended to understand how people use those spaces and what functions those spaces offer to the inhabitants of Kalyanpur slum. Observations of these places have not only helped me to triangulate my interview data but also have given me a wider perspective about the slum in addition to the narratives of my respondents. I have observed a diverse range of men, women, young, and old at these sites who are the integral part of the commoning process in Kalyanpur slum.

Despite the value added by both interview and field observations, there are concerns over the 'trustworthiness' of these types of approaches. The role of the 'the moral self' (Young, 2013) in these approaches has come under particular scrutiny. Following the emergence of constructivism throughout the 'cultural turn' of the 1980s and 90s, it was increasingly recognised that the researcher is not, and cannot be, a static observer. Rather, "we are inevitably part of the social world we wish to study" and must reflect upon our 'personal politics' (Dale & Mason, 2011; Engelke, 2008; Kalir, 2006). As a middle class, young man having close contacts with NGO personnel and being a non-resident Bangladeshi, my identity and personal politics ultimately shaped people's perceptions of me. For example, as many visitors to slums in Dhaka are NGO or donor staff, I was instantly associated with assistance. Whilst this was problematic at first, my long-term presence at the site meant that residents came to know me and understand the research objectives. On numerous occasions, they would tell others "He is just here to learn about us". Over time, I was seen less as a close ally to the NGOs and more as an 'interested observer'.

GPS Tracking

Human beings are not static but mobile which is a basic and indispensable human activity that is essential for all of us. To be able to perform certain daily activities, human beings need to travel from one point to another. When this movement from one point to another is an integral part of a social phenomenon such as commoning, it can be reasonably established that there may be a need for people and things to be tracked as they are intertwined within life-sustaining and life-enhancing processes. Moreover, in informal settlements, where marginal views are not easily accessible by the researcher being an outsider, the use of creative methods (e.g. auto-photography, photo response, GPS tracking) helps capture the nuances and those under-represented voices and narratives. A growing number of studies (e.g. Alam, McGregor, & Houston, 2018; Lombard, 2013) have documented the effectiveness of these creative methods in context of marginalised communities. Therefore, I adapted GPS tracking method to collect the locational data of the respondent's daily activities. From the understanding that commoning needs people to move from one point to another and to interact with each other and the fact that each location in space is associated with one or more kinds of social functions, I wanted to know the whereabouts of the commoning practices. Therefore, GPS tracking of each participant for a single day was the only form of quantitative data collection in this research. To answer research question one and two, where I am interested to know about the characteristics of Kalyanpur slum as a commons, I have relied on this technique in order to bring a spatial perspective.

GPS tracking has allowed me to extract exact locational information (coordinates) of commoning activities. The participants of this research have been asked to carry a Holux RCV-3000 (compact, pocket device) GPS device for 24 hours prior to the day of conducting the interview. A total of three GPS devices have been used in this research which were distributed to the respondents on a roster basis. These devices were chosen for the simplicity of operation (needs just turn on and off) to keep things easy and hassle-free for the respondents. The GPS tracked data added locational context to their narratives coming from the interview process. While the interviews have focused on the 'what, how and why' aspects of commoning, the GPS tracking has allowed to bring the 'where' aspects into the analysis. Tracking movements through GPS devices involves some ethical considerations in data collection which has been discussed later in this chapter.

3.3 Research Process

This section focuses on the research process which includes scoping visits and field site selection, collecting secondary information about the slum and conducting in-depth primary data collection in Kalyanpur slum and lastly data analysis and writing-up. Whilst presented here in a linear fashion, these phases ultimately overlapped within an iterative and flexible research process.

Scoping Visit:

Before the scoping visit, I performed some desk-based literature review on various slums in Dhaka. This familiarisation allowed me to develop a draft scoping visit plan prior to my arrival in Dhaka. I shortlisted three slums based on the criteria that these slums have to be located at the heart of Dhaka's core business district areas³ (Figure 3.1). The reason for developing such criteria has been this underlying assumption that contestation over space is likely to be higher in Dhaka's core due to the high land demand for commercial development and high land value. If slum is a commons at all then slum dwellers have to develop some sort of collective and individual mechanism to deal with such a pressured situation, which eventually would be more visible at a place where the pressure of enclosure is intense. Therefore, commoning practices at slums that are located at the heart of Dhaka's CBD are more likely to be visible and noticeable to an external observer like me. Apart from this criterion, the size and age of the slum also influenced my decision of shortlisting three slums. Before my fieldwork, I had also collected and analysed existing literature, policies, maps, and reports on Dhaka and Bangladesh. I focused in particular on government's policy documents (e.g., GoB Five-Year Plans, National Sustainable Development Strategies, and Dhaka Structure Plan), country-specific NGO and donor reports (e.g., ActionAid Bangladesh, BRACK, World Vision, and Water Aid) and newspaper articles (e.g., The Daily Star, Dhaka Tribune, and Financial Express).

Prior to finalising the study area I visited three shortlisted slums: Sat-Tola slum, Korail slum, and Kalyanpur slum located, respectively, in Mohakhali, Gulshan, and Kalyanpur suburb. This initial scoping visit in February 2017 provided me the opportunity to gather secondary data, familiarise

³ The map presented in Figure 3.1 seems to imply that the selected study is located at the edge of the city. However, the boundary presented in this map is only the administrative boundary of Dhaka Metropolitan area and the urban agglomeration of Dhaka extends beyond this administrative boundary.

myself with the location of these slums, and conduct preliminary interactions with slum dwellers, NGO workers, and local people of these neighbourhoods (e.g., shopkeepers, tea stallers, rickshaw pullers). Through this scoping visit, I was able to understand different settlement dynamics around land disputes, service provisions, and collective actions, and talk to residents about their most pressing concerns. What I realised from these scoping visits is that these slums are not easily accessible for an outsider like me as people living in them are sceptical about outsiders. Unless they saw me as a trustworthy person, they were not going to openly discuss the way their lives revolve around various political and economic issues. Therefore, to gain the trust of the people, I felt the necessity of approaching my final site through a channel or medium that the slum dwellers recognise as their allies.

Selection of Study area:

From my scoping visit, it became clear to me that having trustworthy contacts with the slum dwellers would be an important criterion for my final site selection. I used my affiliation with ActionAid Bangladesh, an international NGO for which I worked for five years, to finally select Kalyanpur slum as my site for investigation. Because, out of these shortlisted slums, it was only Kalyanpur slum where ActionAid Bangladesh had ongoing programmes and community networks. After a detailed discussion with my ex-colleagues from ActionAid Bangladesh who were experienced with running various awareness raising and campaign programme in the slum, I finalised Kalyanpur slum and decided to use this channel to build my rapport with the slum dwellers. The relatively under-explored nature of Kalyanpur slum, compared to Korail and Sat-Tola slum, also influenced my final selection.

It should be mentioned here that though my preliminary entry into the slum was through the channel of ActionAid Bangladesh, I made it very clear from the beginning that I have no current affiliation with any NGOs, donors, or any other agencies and I am only an independent researcher who is curious about the slum and its people. I rented a room just by the side of the slum and lived there for five months over the duration of my data collection. At this time, I also hired two full-time research assistants (RAs), whom I trained in research ethics, objectives, and methodology. I prefer to call them ‘community researcher’ instead; a term commonly used in community economies tradition. Similar to what has been demonstrated by Gibson-Graham, (2006) in the

Latrobe project, I found these community researchers profoundly eager to learn and make difference in their localities.

Both the community researchers were born and brought up in the same neighbourhood providing me significant access to local historical events. They were post-graduate level students of the nearby Bangla College, having previous experience of working in NGO programmes. However at the time when I approached them to be my research assistant, they were only doing some part time private tutoring and were interested to be part of my research. I hired them on a contract basis for the whole duration of my field work. Their main role was to organise orientation sessions with participants, helping me on shortlisting respondents, developing roster and assisting me in conducting interviews. I paid the researchers in three instalment as per the agreed amount. Hiring community researchers didn't possess any ethical challenges. The selection of a male and a female community researcher was strategic, and on reflection highly beneficial, as they provided access to both male and female participants, who could be more reserved with the opposite gender. Being very friendly, approachable and unthreatening, my RAs built rapports with research participants, men and women of all ages, very quickly. Our prolonged presence in Kalyanpur slum also made my team familiar to the slum dwellers where people of all sorts would come to interact and talk to us.

Kalyanpur slum is located in the western part of Dhaka City Corporation (Figure 3.1). It is well connected with some of the city's core urban areas such as Mirpur, Shamoli, and Agargaon by the road network. It is surrounded by the residential neighbourhoods of Paikpara and Kalyanpur Mahalla and positioned within Kalyanpur Mahalla, whose building patterns are significantly distinct from those of the slum (Image 3.1). According to 2015 census data (BBS, 2015), Kalyanpur slum has a total population of 8,129 residing in 2,184 households. The slum consists of ten sections in three different parts: Bell-Tola Basti (Bell-Tola slum), small in size, holding section 9; Pora Basti ('burnt slum'), holding sections 1 to 8; and a very small part holding section 10, which is physically separated off by a large open field known as Bell-Tola. The slum is surrounded by well-connected road networks.

Figure 3.1: Location of Kallyanpur slum (Inset: Map of Bangladesh)

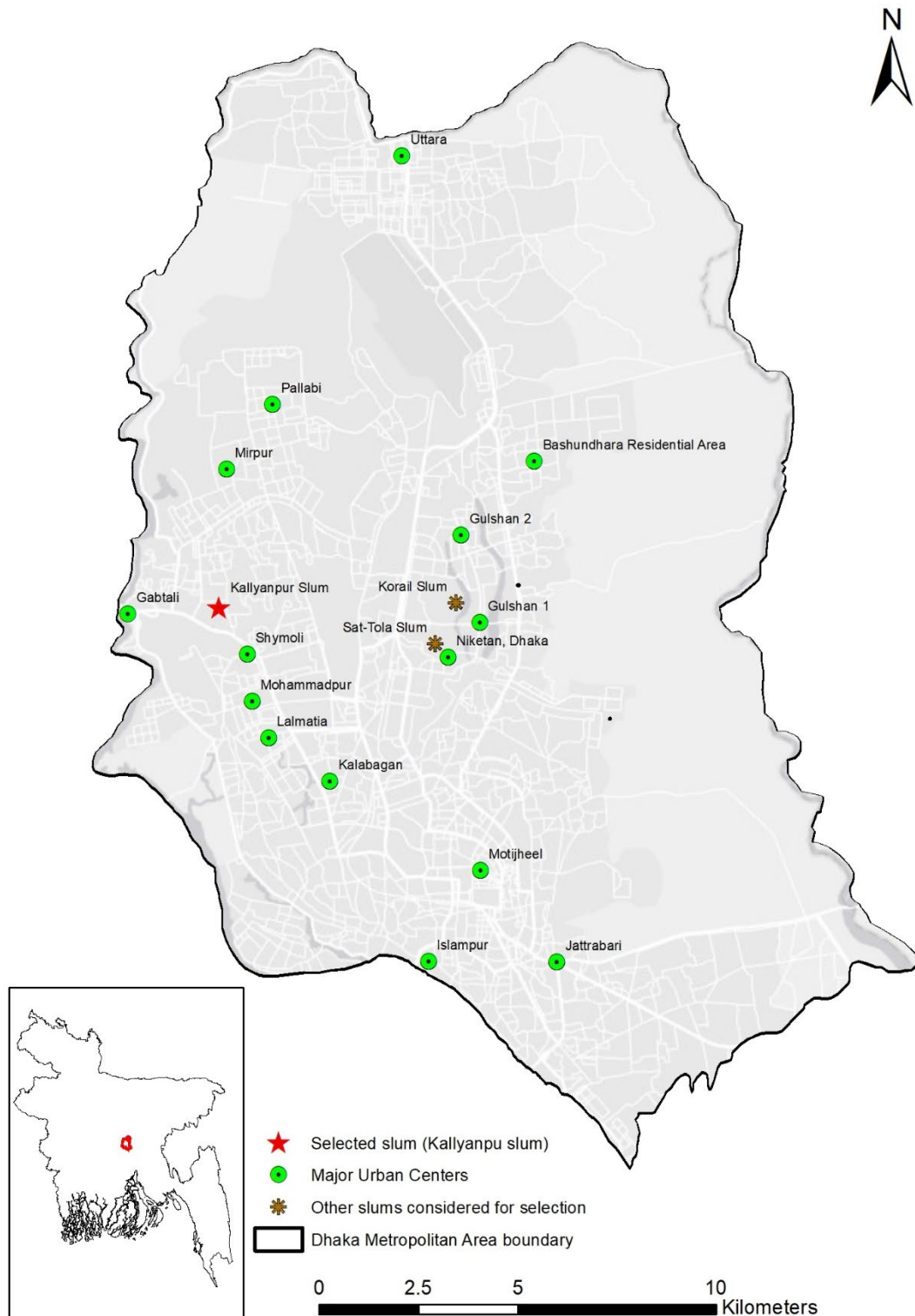


Image 3.1: Aerial view of Kallyanpur slum



Once my site selection was finalised, I organised two different orientation sessions with male and female participants separately to introduce myself, my research, and also to finalise selecting my research respondents. The local partner NGO of ActionAid Bangladesh along with my RAs and CBO leaders, who I previously met during my scoping visit, helped me to organise these sessions. These sessions took place at a child-care centre inside Kallyanpur slum where a total of 37 and 32 female and male participants joined respectively. I requested them to register their interest to participate in my research after briefing them my research topic, objectives, and methods. I also explained them how I am going to use the GPS tracking data and relevant ethical concerns in my research. Based on the interest shown by male and female participants, I selected a total of 15 males and 16 females, a total of 31 respondents, for my research.

Field Work:

I began my work in February 2016 with a preliminary site investigation. A transect walk and informal interactions with various stakeholders helped me to understand settlement boundaries,

water and sanitation infrastructure, housing type, and occupancy pattern. This provided an opportunity to introduce myself and the research as we passed tea stalls, shops, and houses. After initial introductions, my RAs and I would walk through all the lanes of the settlements on transect walks, noting down what we saw, and to whom we spoke. These exercises were critically important as access to services, housing quality and levels of CBO and NGO activity varied within the settlement. On numerous occasions, local residents (and excited children!) showed us around, taking us down previously hidden or unseen lanes. Being led around by local residents was central to understanding the social, political, and economic boundaries (beyond the spatial) in the site.

Once the preliminary site investigation was completed in the first few days of my fieldwork, I developed a roster of handing over the GPS devices and consequently conducting interviews. The idea was to hand over each GPS devices to each respondent at a convenient time of the respondent prior to the actual tracking date. Each of the respondents was given adequate lessons on how to turn on and off the devices. It was made very clear to the respondents that this device would only register the location of their various activities as long as they carry the device with them during their regular business. All my respondents were very enthusiastic about the device and asked me several questions such as how does it work and how similar or different it is from a mobile device. Upon successful GPS tracking of a respondent's regular activity location, the same respondent was interviewed the next day.

A semi-structured interview questionnaire was developed before the fieldwork based on the overarching theoretical framework of this research. In developing the questionnaire, the research aim, objectives, and research questions were taken into consideration. The questionnaire began with basic demographic information such as age, gender, income, expenditure, place of birth, migratory history, and so on⁴. The questionnaires had both closed and open-ended questions, which allowed me to collect core household data and conduct open discussions about their daily activities and associated opportunities and struggles with those activities. The questions were asked in simple and relevant local terms to make it easily understandable to the respondents. These interviews varied between 30 minutes to 1 hour and following consent, the majority were recorded via dictaphone. My RAs would ask the questions, and I would write the response on the

⁴ A table has been provided in Appendix showing the basic demographic profile of the respondents

questionnaire. Whilst audio recording allowed me to transcribe the interviews at a later time, bringing out the Dictaphone could shift the interview dynamic and put respondents on edge, meaning they would be more formal or selective with their answers. Often, the conversation before and after the recorder was turned on was more insightful. Upon realising this, I took extensive notes, rather than use the dictaphone, to avoid disrupting the flow of conversation or causing unnecessary concern. Participants were purposively selected to include diverse individuals, including single mothers, tenants, owners, and a mix of ages and occupations living in different parts of the settlement. A total of 31 interviews were conducted from February to June 2017. I also performed field observation just to see what is happening at a place of my interest. The nearby Bazaar, tea stalls, gaps between houses, open spaces, all were full of activities for most of the time in day. These observations were key to understand how people organise their space in their daily life. These observations revealed some crucial differences in why some places were intensively used by various purposes whereas some places were avoided. Along with my close interaction with the slum dwellers, these observations deepened my insight into the ‘community’ power structure, very quickly revealing influential leaders in the settlement. Table 3.1 provided below summarises various methods, source and tools used for primary data collection.

Table 3.1: Summary of various data collection methods

Method	Data source/Sample size	Capturing/Recording tools
Semi-Structured interviews	31 individual interviews	Printed questionnaire, dictaphone
Field Observation	Individual and group activities at various locations across the slum, informal interaction with various stakeholders	Field notes, photographs
GPS tracking	Tracking over one day for each respondent (31 in total)	Three GPS devices used on a roster basis

Data Analysis

According to Yin (2009), data analysis must be accompanied with rigorous empirical thinking, sufficient presentation of evidence, and careful consideration of alternative interpretations. Taking note, every effort was made throughout fieldwork to organise raw data in a timely, secure and efficient manner. Audio recordings were transcribed, interview notes and field observations were written up in Word and photographs were grouped according to specific space on the date of collection. GPS Tracking data were converted into shape file to perform further analysis in ArcGIS. Upon my return to Christchurch, I re-organised the data into files according to data type: 1. Semi-structured Interview, 2. GPS Tracking, 3. Field Observations, and 4. Secondary data such as NGO reports, newspaper articles, satellite images of the slum and OpenStreet Map data of the settlements (i.e., shape file of the buildings and infrastructures in the slum). After organising these data, I performed various necessary cleaning⁵ of these data to make them ready for various analysis.

According to Jackson (2001), analysis of qualitative interviews is an iterative and considered process whereby the researcher should closely read transcripts, picking out ‘codes’ from particular words and phrases which can be further analysed for relations to each other. Coding can be broken down into two broad phases: ‘open’ and ‘axial’ (Blaikie & Priest, 2019). Open coding involves the breaking down of data into categories, and axial coding is used to find relationships between these categories. Analysis of interview data was undertaken firstly by reading the transcribed interviews all in detail and highlighted particularly insightful phrases, sentences and paragraphs.

Then I created a list of keywords (e.g., migration, leader, eviction, movements, supports, services, co-sharing), themes (e.g., access, benefits, use, care, and responsibility) and headings (e.g. NGO or leader-initiated CBOs), and re-read the transcripts to code key phrases and direct quotations into specific categories. I then compared the interview data with my field notes, photographs, NGO reports, and newspaper articles. This comparison across various sources of data helped me to identify patterns and trends at the settlement. Content analysis was performed on the interview data and field observation to examine the three research questions that are being asked. GPS

⁵ Some outliers were found due to the random inaccuracy of GPS signal, which needed to be processed before performing analysis

tracked data was analysed to find patterns in activity locations and type of activity described in the interviews. A space-syntax method was also adopted to explore the spatial organisation of the slum and the GPS tracked data has been used to find the correlation between spatial configuration and activity locations. This technique is discussed in greater detail in chapter five.

3.4 Ethical, Logistical and Methodological Reflections

3.4.1 Ethical Reflections

Managing Expectations

The sheer number of NGOs and donor organisations in Kalyanpur slum and my access to the slum through the channel of ActionAid Bangladesh meant that many people saw my research project as some sort of funding inception project. It took me around three weeks of interaction with the residents to demonstrate that I was an independent researcher, and not an NGO or donor official. I was careful about this potential expectation from me from the very beginning. During the orientation session, which was organised with the help of a local NGO, I clearly stated the purpose, aims, objectives, and conditions of voluntary participation, to avoid disappointment. Over time I came to understand how NGOs, donors, and researchers leave a legacy, as people often referred me to previous researchers whose researches were closely aligned with various NGO programmes. This meant that there was an element of expectation that my research would directly feed into some sort of NGO programme. Many expressed their hope that I could assist them in the future when I was a ‘big person’ (i.e., professor or NGO practitioner). I was always clear to state that I was a neutral, independent researcher and that my research brought no direct benefit, but that I would raise their issues of concern in various forums.

Another point to note is that I was also initially received with suspicion, as some local leaders believed I was a journalist or worked as an informer for agencies. Upon entering the settlement, we encountered some aggressive male leaders who demanded to know what we were doing. However, after explaining the research, they were eager to share their opinion and suggestions, and were interested to tell the history of the slum.

Sensitive Research Topics

The residents of Kalyanpur slum revealed some sensitive information about land, housing, services, and politics. Whilst the influence of political patrons (such as MPs and local landlords) is widely known, many feared retribution from local political leaders or their associates if they were overheard discussing land grabbing, corruption, and political control. This was particularly the case for opposition party supporters, who were frequently harassed by ruling party leaders within and outside the settlement. The influence of the MP and political elite in the area meant that some were afraid to speak out. During one visit, one lady whispered “*we’re being watched so I am not able to comment on the new [house] builds*” (field observation 2017). However, our prolonged presence in the site meant people began to trust us, and were increasingly willing to talk, often ushering us into their homes or to tea stalls for lengthy discussions. As a young man with a clear research mandate, I believe the residents felt unthreatened, increasing their willingness to talk openly.

I was aware of the sensitivity of the topic from the very beginning of my research work. Therefore, I assured the participants that the data collected from them will be stored securely and no body other than me will have access to these data. The privacy of the respondents will be given highest priority and pseudonym would be used in the research. I also made it clear that the GPS tracked data would be represented in an aggregated manner to avoid identifying individual movement routes and locations. I took every possible measure to ensure confidentiality of the participants at all the stages of my research (e.g., seeking private spaces for interviews, safely storing data in locked cabinets and encrypted files, using pseudonyms of the respondents in the research).

3.4.2 Logistical Reflections

Mobility

Complex land tenure arrangements, blurred internal section boundaries, and narrow or hidden lanes rendered accurate data collection difficult. There is no official demarcation among the sections and there was often confusion among the respondents regarding the section number to which they belong. Identifying respondents’ houses were challenging as these houses were not numbered. To overcome this challenge, I used local knowledge as much as I could. My RAs were quite familiar with the neighbourhood. For navigation, I often used a paper map produced by the

community people that highlights major features in their community such as Mosque, Bazaar, playing ground, and so on. The slum being located on a low-lying land below the road level also hampered movement during the rainy season. Most of the lanes were submerged during heavy rain in May. This meant that we would have to wade through knee-high water to reach the respondents for interviews. Though this was a challenge to complete the data collection within the timeframe, my RAs and I tried our best to honour arrangements with the respondents which also gave us the opportunity to see how residents were affected by, and responded to such events. There were lots of open spaces to sit at tea stalls or outside shops in every section, meaning I would often sit and talk for hours with residents.

Timings

Flexibility was ensured for every participant, to avoid disruption to their daily lives. My RA and I approached residents in the field sites at pre-arranged or convenient times of day, for example, after meals, cooking, prayer, nap, and wash times. We were also careful to respect religious festivals (such as Eid and Ramadan). As many respondents worked all day, visiting on weekends was important, especially to talk with garment workers.

3.4.3 Reflections on the source of primary data: Community Based Organisations versus individual

Given the overarching research question of this thesis, it could be argued that community based organisations (CBOs) would have been a better source of information when it comes to adopting a commons framework. As I am interested to know what people are doing to collectively transform the space of the slum into a commons, it is not surprising to think of CBOs as the primary source of data and focus group discussions (FGD⁶) as the appropriate mean of data collection over semi-structured interviews. However, there are several reasons that influenced me to select individual respondents as the primary source of data and semi-structured interviews as the primary means of data collection. The first reason is that the CBOs in Kalyanpur slum are closely associated with NGO programmes. There are no CBOs that are independent and operate outside the monitoring of NGOs and donor agencies. In most of the cases, the CBO leaders are also local political leaders,

⁶ Focus group discussion or more commonly known by its acronym FDG is a popular form of group data collection for various NGO programmes in Bangladesh.

house owners and their responses are not necessarily representative of ‘the community’. From my previous experience of working with marginalised community, I know that many communities are suspicious about their CBO leaders that these leaders were ‘reaping the benefits’ from NGOs. Therefore, I was interested to understand the views of the regular slum dwellers who are not necessarily affiliated with any CBO or NGO programme.

Using CBOs as the primary source of information could potentially hinder noticing the organic forms of collective action such as anti-eviction protests. Instead, an investigation of daily activities of the individual transcends the boundary between individualism and collectivism as there are many individuals whose daily activities are closely linked with other individuals, groups, and the overall community. Therefore, semi-structured interviews of individual respondents have allowed me to understand commoning at both individual and group level. Moreover, where CBOs or group level collective activities are mostly focusing on micro-credit, water and sanitation, an individual performs far more activities on a daily basis that are of common interest. Individual struggles, negotiations, conflicts, initiatives all contribute to the commoning and transformation of Kalyanpur slum.

3.5 Concluding Remarks

Section 3.1 discussed the ontological and epistemological underpinnings of the research. A critical realist approach that acknowledges individual agency, but also the broader (structural) context within which such agency is enabled and/or constrained, was adopted. Section 3.1.2 focused on the adoption of case study approach which included both qualitative methods such as semi-structured interviews and field observation along with quantitative data capture from GPS tracking. Section 3.2 outlined the research process, from initial scoping visits and field site selection, to in-depth field research. Section 3.3 elaborated on the ethical, practical, and methodological limitations of the research. The next chapter presents the empirical results deriving from the interviews along with field observation and secondary sources in light of the commons framework discussed in chapter two. Chapter four, therefore, is critically important to answer the first research question in theorising Kalyanpur slum as a common.

Chapter 4 : The Sociality of Commoning in Kalyanpur Slum

4.1 Introduction

My first encounter with Kalyanpur slum was interesting. It was early February of 2017; almost a week since I arrived in Dhaka for the data collection and I was very curious to visit my study area. I thoroughly studied the map of the area, the main roads, the Bazaars, and the commercial hubs before conducting my first visit. I tried to orient myself with the area prior to my first visit. It was around 11 am when I was dropped at Kalyanpur bus stop by my younger brother in his motorbike to avoid the rush-hour traffic of Dhaka. From there it was a 10 minute rickshaw ride that brought me to the entrance of Kalyanpur slum. After a little walk along the main alleyway of the slum, I picked a tea stall to observe how the daily life of the people unfolds at this very space. While observing the activity of the people, I also had a very enlightening discussion with Mijan (48, male), the owner of the tea stall. Mijan has been living in this slum for the last 20 years. Mijan seemed to be a very positive man who with a big smile on his face, told me that his business is going well in the last few years. He thinks that the cumulative income of the families in the slum has increased drastically, as most of the family members are now employed in one way or another. This increase in average income level has also impacted his business in a positive way. He then said, “If some people are poor, that is because of other social problems such as addiction, gambling or eviction/fire. Otherwise, we are happy here.” While listening to Mijan, I also observed how he uses his shop premise not only as a tea stall but also as a living room and meeting point. It was interesting to notice how people, especially men, were performing the act of socializing at various tea stalls and were chitchatting about various topics.

Sitting on a bench in front of Mijan’s stall, the most interesting action I noticed was the selling of fish at a square nearby. The selling place seemed to have similar function as the tea stall. Several women gathered around the fish vendor and were chitchatting about daily life while negotiating the fish price. They were trying to collectively influence the fish vendor to reduce the price. The fish vendor was strict in his offer and the negotiation continued. Quickly that small square became the centre of all the attention and even people who did not want to buy fish stopped to see the

negotiation as well as to take part in that process. The vendor had three to four different size of fish on top of his big pot. Once a fish was sold, he took out a new fish from the pot and placed it on the top, at the place of the fish that has been sold. Biggest fish was the one to be sold first and the smallest one was the last. All the fish were sold very quickly except for a couple of small ones. The vendor wrapped up his equipment soon and didn't bother to sell the rest. Immediately after he left the place, two other vendor came with new fish and eventually took his spot. Then the same sequence of events started to unfold which to me looked like a well-rehearsed choreography.

On my way back to the home that day, I kept thinking of the contrast between my prior geographic imaginations of the area with what I have experienced inside the slum. The very spatial layout that emerged to me from this first visit was very different than the geographic map of the area I studied before. The emerging map of the slum was now consisted of those squares, narrow roads and paths, which in the geographical map was almost invisible. Although the main roads, Bazaars, and commercial hubs outside the slum play a significant role in the overall spatial layout of Kalyanpur neighbourhood, for the slum dwellers it is the inner dynamism of their space that matters the most. I was thrilled as a researcher to think that in the coming months, I would be unveiling these invisible complexities through my fieldwork.

4.2 An overview of Kalyanpur Slum

Before diving deeper into this first analytical chapter of this research, I would like to provide a brief outline of this chapter. This chapter contributes directly to the first research question of this thesis: what type of space is Kalyanpur slum or what is Kalyanpur slum? This question is explored through investigating the process of negotiating the key five aspects of commons in Kalyanpur slum. The daily activities of the people living in Kalyanpur slum is examined in this chapter using the commons identikit proposed by Gibson-Graham. This investigation further helps to identify the characteristics of Kalyanpur slum as commons and how it is different or similar to other commons, contributing to the next two research questions discussed later in chapter six. This chapter mainly focuses on the socialities of commons by examining those key aspects before discussing the spatialities of commons in the next chapter. These explorations contribute to enriching our understanding of urban informal settlements, and therefore assist us in designing approaches to them that are more humanistic and informed by the realities on the ground.

In this examination, I start this chapter with a brief history of Kalyanpur slum, because the way this slum was established and has grown over time has major implications for its current affairs. Fire and eviction incidents have been an integral part of this slum from its very beginning. The local name of the slum, Pora Basti ('Burnt Slum'), signifies its relation with fire and evictions. Fire and evictions are not two distinct aspects of this slum but rather are interconnected, as shall be noted in the coming sections. The historical trajectory and the incidents of fire and evictions have shaped the landscape of Kalyanpur slum to a great extent, and without examining these crucial aspects, it would be difficult to understand the ways in which the people of Kalyanpur slum organize themselves to negotiate their daily lives.

Following the overview of Kalyanpur slum, I dive deeper into the analysis of the daily lives of the slum dwellers around the key five aspects of commons: access, use, benefit, care, and responsibility. This exploration is mainly based on the semi-structured interviews, newspaper articles, and other NGO reports. The results of such exploration help answering vital questions as we shall see later in this chapter, such as how is the access to the slum maintained and controlled? Is the access to the slum limited to a particular group or open to everyone? How is the matter of inclusion and exclusion being dealt with by the slum dwellers? Similarly, the question of use, benefit, care, and responsibility will be addressed in this chapter. For example, I explore the ways in which the slum is being used by the residents. This exploration is key to understanding if Kalyanpur slum is only about securing affordable housing in the city, as described in the hegemonic narratives of slums? Or is Kalyanpur more than a conglomeration of poor housing and shelter? Who benefits from this slum? Is it only the residents of the slum? Or are benefits realized across the city? Answers to these questions are vital evidence to disrupt the predominant views of urban informal settlements.

4.2.1 History of establishment

Following my first visit, I have come to know more about the slum through my interactions with various people. The history of this slum is as interesting as its present-day affairs. Though the official historical data on Kalyanpur slum is highly limited, I have mostly relied on my own interviews, newspaper articles, and some NGO reports to piece together a historical overview of

the slum. Most interviewees articulated the history mainly through major events that have taken place in the slum since it was first established.

The slum was built in 1988 on 13 acres of low-lying land owned by the Ministry of Housing and Public Works. Its history goes back to the early days of the partition of British India into India and Pakistan⁷, when the newly formed Pakistan government acquired the land for the rehabilitation of Bihari refugees generated by partition. Eventually, the Bihari community was rehabilitated in the Mohammadpur area to the south; subsequently, the land was gradually settled by marginalised and shelterless people. These people migrated to Dhaka in order to secure their livelihood, especially after the devastating flood of 1988. A massive number of flood-affected people from the coastal areas of Bangladesh – predominantly Bhola, the country's largest island – migrated to Dhaka and settled themselves on this vacant land that eventually became Kalyanpur slum.

From 1988 through the 1990s, a tremendous number of houses were built on this land (for instance the gated communities, government quarters and Kalyanpur housing as identified in Image 3.1), which is owned by House Building Research Institute (HBRI), a body of the Ministry of Housing and Public Works. Initially, the land was not suitable for habitation because it was densely covered by arum plants, which needed to be cleared by the migrant community before they could build their makeshift houses. They also filled the space with sand and soil, extracted from nearby water bodies, in order to raise the low-lying ground. In this period areas neighbouring the slum underwent enormous socioeconomic changes. Areas such as Kalyanpur, Mohammadpur, Gabtoli, and Mirpur were booming with residential and commercial development. Where Kalyanpur and Mohammadpur were transforming into high-end residential areas, Mirpur was already known for its exotic markets and shopping malls, and Gabtoli was the main transport hub for Dhaka, with extensive bus counters, terminals, hotels, cinemas, and so on. Newly enriched elites and upper-middle classes began demanding new spaces of consumption and residence all over Dhaka, whereas local and foreign corporations, developers, and financial institutions sought spaces in commercial hubs such as Motijhil, Farmgate, Gulshan, and Banani. These changes in land-use patterns drastically intensified land values and demand in this part of the city as investment

⁷ The Partition of India took place in 1947 when the Indian subcontinent was divided into two independent dominion states, the Union of India and the Dominion of Pakistan. Bangladesh became a part of Pakistan which later got its independence from Pakistan in 1971.

opportunities in infrastructure and real estate projects increased at a compound rate (Mondal, 2014).

In 1996, HBRI, aiming to regain control over the land which had been made liveable by this migrant community, served an eviction notice to the dwellers. Caught totally unawares, the slum dwellers sought help from NGOs and civil society and human rights organisations. With their active support, the slum dwellers moved to the High Court Division of the Supreme Court and finally managed to push back the eviction threat. This proved temporary: on 21 December 2003, the authority, by then fully prepared, evicted approximately 40,000 people from Kalyanpur slum. Hasina Begum, one of my eldest respondents, was 43 at the time, and still remembers the misery of that night:

This destruction came with no better warning than a letter given to me the night before. I didn't have enough time to shift my belongings to a secure place. I decided not to move and to hold my ground. But with the devastating scene of the unrelenting bulldozer and police in riot gear in action, I feared for my children's lives. I fled. (Hasina Begum, 59, widow)

Soon after this demolition, the slum resurfaced as slum inhabitants returned, this time in smaller numbers. The predominance of people from Bhola District now weakened as many other marginalised households settled in from various parts of the country. With a growing number of people settling in the slum, there emerged several local leaders with substantial decision-making power in the slum, largely under the aegis of the two main political parties. Many of them built houses right after the 2003 evictions, as many as 60 to 70 houses each, turning themselves into slumlords on land that is nominally owned by the government. These leaders accumulated their power by renting these houses to a large number of migrants and consequently increasing their influence not just over their tenants but over the overall slum community.

4.2.2 The present situation in Kalyanpur slum

Most of the developments in Kalyanpur slum occurred in the post-eviction aftermath of 2003. NGOs have become more active, helping the slum dwellers form a variety of community action groups since early 2004 as well as starting micro-credit and hygiene programmes and providing

new services and facilities. The first water connection was made in 2004 with the installation of several water points with water supplied via tube pump with the help of the NGO called 'Dushtha Shasthya Kendra' or DSK, which also built communal toilet facilities. Currently, there are no health facilities within the slum (apart from a few pharmacies); access to these are in the nearby cross-market area (Kalyanpur Bus Stop) about 10 minutes away by rickshaw. The slum has two primary schools, both operated by NGOs. As there is no city corporation service for waste collection, DSK has introduced a waste collection system, run by the community. In terms of electricity, between 2003 and 2010 the number of electricity connections was severely limited; now almost all the households have access to electricity. This is thanks to the local leaders, who brought electricity connections to the slum on their own initiative (something NGOs had not achieved), a situation many see as the further exertion of influence and profit-making because these connections are made in the name of those leaders who rent out electricity at 300 BDT (3.75 USD) per month per connection. With one connection, a household can run a fan, lamp, TV, and CD player.

There are three main occupancy patterns in Kalyanpur slum. The first is the owners, those who have built their houses or purchased them from other owners. While many owners live in the slum, others prefer to live in Mahalla and earn income from renting out their house in the slum. Many own more than one house. Those who own multiple houses are considered the decision-makers in the slum. The second type of occupant is the tenant, who pays monthly rent for occupancy to the owner or to a designated person set by the owner. Though there is no precise data as to the number of owners and tenants in Kalyanpur slum, the interviews of the respondents suggest that most inhabitants are tenants. Presently, many tenants are becoming owners by purchasing from their current landlords. Many tenants are longstanding, having lived in Kalyanpur slum for up to 25 years, and are very loyal to their landlord. Monthly rent for a typical house varies between 1,200 and 3,000 BDT (15 to 37.50 USD). This rent highly depends on negotiation and the owner-tenant relationship, and in some cases, the owner values loyalty over prompt rent and is happy to extend the rent payment date.

Another form of occupant is what I call 'the agents' of the owners. The agents are the individuals who are loyal to the real owners and live in the slum on behalf of the owners. Slum dwellers often

refer them as Mastaans⁸. Only a few influential slumlords can afford to have such loyal agents. By the account of most respondents, these agents are outsiders who have muscle power and are maintained by the local leaders to serve their interest. This group does not directly pay rent to landlords but rather works for them collecting rent and payment for electricity bills, installing and collecting payment for the satellite TV connection, and so on. In general, the slum dwellers do not treat these agents as their own and are rather fearful of these people.

Most of the houses in Kalyanpur slum are of a single room, between 14 and 18.5 m² in area. The kitchen is part of the main room and the bathrooms are on a shared basis and located outside. The houses are certainly tiny, but the people living in them make every possible effort to make it work. The average dwelling varies between four and seven household members. While adults are expected to establish their own independent household upon marriage, it is quite common for two or more extended families to eat together, especially when one is going through a crisis. Most households can afford and have availed themselves of an electricity connection. Common electric appliances are lights, fans, mobile phones, and TVs (and, occasionally, a refrigerator). Dwellings are constructed of temporary materials such as bamboo or wood for walls and tin (corrugated iron sheets⁹), straw, and/or polythene for the roof. Most people are not interested in investing in housing materials or in buying heavy furniture; even those with the capacity to do so tend to avoid investing in their housing conditions because of tenure insecurity.

Despite significant socio-economic and material improvements since 2003, the fear of eviction remains exactly the same. Despite constitutional and international guarantees now in place against forced evictions and earlier High Court judgments directing the government to provide proper notice and arrange rehabilitation measures before displacement, Kalyanpur slum was again subject to demolition in January 2016 (Image 4.1). This is interesting because the slum was by then very well known, as well as implicitly sanctioned by the government, as many of the women residents who were subject to that eviction were part of a Women's Credit Scheme (which provides micro-credit to very poor women) approved by the NGO Bureau, a government ministry. Where one government department was trying to improve the livelihood conditions of the people living in the

⁸ Mastaans in Bangladesh generally refer to a group of people involved in organized crime and violence. They are often patronized by various political groups to serve their vested interest.

⁹ Galvanized sheet iron which are primarily used as roofing, side and peripheral fencing materials

slum – at least as suggested by the NGO Bureau’s role – another was trying to disrupt that livelihood through evictions without any rehabilitation scheme.

However, the response to the 2016 eviction drive was not the same as in 2003. Unlike before, an organised protest quickly erupted throughout the slum and a clash with the riot police ensued. Agitated residents began throwing brickbats at police and burning scraps in protest. The police retaliated with rounds of tear gas. The clash lasted for a couple of hours before the High Court intervened, by directing the government to halt the eviction, following a petition filed by a group of NGOs. The court set a three-month stay order on the drive (which was extended further) and also ordered the government not to harass or arrest any slum dwellers without specific allegations. Some 500 structures had already been brought down before the eviction was halted, causing about 3,000 people to spend the night under the open sky in the January cold in a nearby field. Many news reports also suggested that at least 30 people were injured, including one by bullets, in the day-long clashes.

However, following the stay order, a massive fire broke out throughout the slum on the early morning of the very next day. Local people reported that a group of outsiders (Mastaans) with iron bars and knives arrived on the scene, poured petrol on houses, and set them on fire. An estimated 600 dwellings and 125 shops were destroyed in addition to the damage caused by the eviction drive (Image 4.2). Many eyewitness accounts suggest that the Mastaans were loyal to the local Member of Parliament (MP).

Image 4.1: Eviction drive at Kallyanpur slum by the Ministry of Public Works, 21 January 2016.



Source: The Daily Star, 22nd January (2016)

As soon as the fire was out, the slum dwellers organised a procession to protest against what they called arson. They chanted slogans against the local Member of the Parliament (MP), alleging that he was behind the fire and demanding that he be held accountable. Most of the respondents believe that the eviction drive and the fire incident are connected as they recalled that some of the slum dwellers were threatened by the MP on the night of eviction drive. The MP has since been elected under the banner of the current ruling party and is also a founder and chair of a property development company. News reports suggest that the MP denied the allegations straightaway after the fire incident (*Dhaka Tribune*, 2016; *NEW AGE*, 2016). Many people find that the tensions over the land in Kalyanpur slum in recent years have escalated largely due to the proposed Bus Rapid Transit Project, which will have a stop near Kalyanpur slum. This potential stop has increased the land values in the area at a compounding rate. A construction company is particularly interested in this piece of land, and this company is chaired by the local MP, who recently gave a presentation to the prime minister to win the bid for the construction project.

Image 4.2: A part of the slum burnt in the fire incident



Source: The Daily Star, 22nd January (2016)

This eviction drive and fire that took place in January 2016 is very fresh in the memory of most Kalyanpur slum inhabitants. Some people believe that the fight is not over and neither the local MP nor the HBRI people will stop before they achieve what they want: the disappearance of the slum. Some are optimistic, maintaining high hopes that High Court's final decision will be made in their favour. They believe that there will come a time, after a decision in their favour, when the slum dwellers will no longer need to worry about shelter. But until then, there is this status quo, which shapes to a great extent the ways in which everyday lives within the slum operate. The everyday practices of the slum dwellers in and around the slum are informed by the symbolic meanings they associate with their place. The public space, the open space, the houses, the Bazaar – all are being accessed, used, cared for, or even not used or avoided, in particular ways related to the symbolic meaning of these places, shaped by various historical incidents. The contestation over these spaces is as much between the slum dwellers and HBRI as it is between different forces within the slum. And so the people have distinct ways of negotiating and coping with not only these contestations but also the scarcity of services and facilities that is felt in their daily lives. These historical events, along with the daily practices that they perform to ensure their socio-economic wellbeing, constitute the commoning of Kalyanpur slum.

4.3 Negotiating key issues in the slum

Now that we have explored the key defining moments in Kalyanpur slum, I would like to dive deeper into the daily lives of the people. As I indicated previously, this investigation involves exploring the ways in which the key five aspects of commons – access, use, benefit, care, and responsibility – are negotiated by the community. I perform this analysis mostly based on the responses derived from the semi-structured interviews, but the analysis is also informed by my personal observation. This is an important step to answer my first research question around understanding the slum as a commons. Therefore, in the next few sections, I shall highlight various ways that the space of Kalyanpur slum is being negotiated by the dwellers through their everyday practices. I argue that these practices are what Gibson, Cameron, & Healy (2016) and Linebaugh (2008) have called ‘commoning’, activities performed by the slum dwellers, in their making and remaking of the slum as an urban commons.

4.3.1 The way access to the slum is maintained

Access is a very important aspect for the slum dwellers, something that plays a key role in defining their identities. The spontaneous narration of their story of migrating into the slum and how their daily life unfolds in and around the slum provides a rich description of how access is maintained or controlled in the slum. Various people access the slum, including retail workers, business people, labourers, customers, NGO workers, service holders, strangers, police, and political party leaders. Access to the slum is therefore shared among a wide range of people and open to people not only living in the slum but beyond. However, that doesn’t mean that access to the slum is unrestricted. There is a process of inclusion and exclusion in place that maintains a balance in terms of access to the slum that is between narrow and unrestricted. Before examining this process of inclusion and exclusion, I shall discuss the ways in which various groups access the slum.

The first dominant group that accesses the slum is the slum dwellers themselves. They move in and out of the slum on a daily basis without any sort of physical barrier or constraint. They take full advantage of the good connectivity of the slum to the rest of the city. Though their access to different parts of the slum varies, which I shall explore through spatial analysis in the next chapter, overall the slum dwellers can access the whole slum without many problems. Though there is a tendency, especially among the older generations, to live and stay close to others of the same

geographic origin, youths and teenagers tend to be anywhere in the slum they feel necessary. For instance, Hashi (58, female), who runs a tea stall in the slum, mentioned that her whole day revolves around section eight of the slum (Image 3.1). She said,

Though there is no problem for me to roam around the slum freely, I prefer to be here in section eight all day. Most of the people living here came to this slum from Kishorganj at the same time as me. They are trustworthy and helpful during the crisis.

Abdul (56, male) expressed similar feelings regarding his neighbours, as he believes the bond that used to bind all the slum dwellers together are weakening by the day. He said that he no longer feels comfortable roaming around the slum as there are lots of newcomers who simply do not know how to respect the seniors. He says,

The slum lords are allowing people to settle down here in the slum, whoever they think would be beneficial to them. These people are even not poor like us and they don't hold a common value of the slum like us. I used to be very vocal about various issues of this slum, but now I just observe silently and go about my own business.

Listening to Hashi or Abdul, who has been living in Kalyanpur slum for last 25 years, it is very obvious that they had a particular vision of the slum which they believe is not the direction in which the slum is heading. They believe that there is an increasing number of people settling in the slum, but that this increment is not helping the slum dwellers to achieve what they always wanted to achieve – a sense of security. These newcomers are not interested in being part of the greater movement against the eviction threat; rather they are being brought by the slum lords to enhance their business profits and influence. Therefore, people like Hashi and Abdul prefer to be in close contact with their friends and neighbours who share the same ideology and have gone through similar experiences. This preference is manifested in their limited mobility throughout the slum, and they have produced a notion of community that has reduced in scale from the whole slum to their respective section of the slum. This process has consequently compelled them to increasingly restrict themselves to their respective section of the slum.

Nonetheless, the scenario is quite different for other respondents. Comparatively young respondents mentioned that they feel comfortable roaming around the slum. They actively seek

out and often find opportunities to sustain their living in every corner of the slum. These respondents, irrespective of gender, also emphasised that it is important to know everyone in the slum. The connections they make with people at various parts of the slum help them to overcome many challenges that they face on a daily basis. For instance, Kholil (35, male), living in section four and working as a construction labourer in the nearby Kalyanpur residential areas, points out,

My jobs are of a temporary nature. Some days I have work, some days I don't. When I don't, I have friends throughout this slum who help me out. Salam from section nine, Robiul from section eight and Zakir from section three, to mention a few names, are like brothers to me. I spend most of my spare time with them at those sections. They will always share any prospective job opportunities with me, and I do the same for them. These connections are vital to us.

Where for Kholil free movement throughout the slum is important to maintain his network and connections to secure his daily work, Shorna (38, female), being an NGO field staff person, finds her free movement key to organizing people around various NGO activities. She says,

Unlike the village from where I moved to this slum, there are no social restrictions for women to freely move around this slum and take up any job that they want. Otherwise, it would have been very difficult to involve women in the NGO activities here. Now almost all the women are actively engaged with various NGO programmes. Meetings are held weekly at various houses. We live here like a big family and almost everyone is known to each other. New migrants are often shy at first to get involved, but once they see us, they become like us.

Saiful (40, male) is an interesting respondent in this regard, identifying himself as “happily unemployed” as he enjoys spending his time helping others. Saiful used to be a chef at a restaurant at Gabtoli bus terminal nearby but was dismissed seven months ago after being accused of intentionally poisoning the food. When several customers got stomach upset, he was summarily blamed and fired after being punched in the face several times by the manager. Saiful believes that he was framed by the cashier as revenge for being vocal about the cashier's unprofessional

handling of the cash. Since then, Saiful has not actively searched for a new job and rather relies on the support provided by various people in the slum. He mentioned,

I do things for people that they are unable to do, due to various constraints. I took Jahir's mother to hospital last week. Jahir was at work and his wife was not able to carry that old lady suffering from liver problems to hospital. When he called me, I agreed straightaway and did the job. I spent the whole day at the hospital with them. I often bring Kalam's children back from school and babysit the younger ones. I helped Babu build his new house in section 9. Sometimes I cook at Jorina's restaurant and give her cooking lessons and business tips. That's how I spend my day. In exchange I want nothing, but they offer me meals and sometimes cash. As I don't have any family, I am happy to be like this.

The above narration from Saiful is closely aligned to care; one of the five key aspects of common which has been discussed later. However, I have mentioned his narrative here because of his reputation as a "helping hand" has given him access to every part of the slum. In my five months of data collection, I ran into him in almost every corner of the slum. Once I saw him helping children make cricket stumps from tree branches. When I asked Saiful about his attachments with the slum and its people, he mentioned,

I know every path and alleyway in this slum. Yes, I do live in section four, but I belong to all the sections. Seniors, young people and kids all know me by name. I would have not been able to help people if they didn't welcome me at their places or didn't feel comfortable with my presence. No one ever asked me what I am doing here. I can go to anyone's house at any time.

This freedom of movement is enjoyed by almost all the slum dwellers in Kalyanpur slum. Though it is not a massive area, the slum is divided into sections for the ease of identifying various parts of the slum. People are often identified according to the section number where they belong but this is solely for identification purpose and being from a particular section does not hinder people's accessibility to other sections.

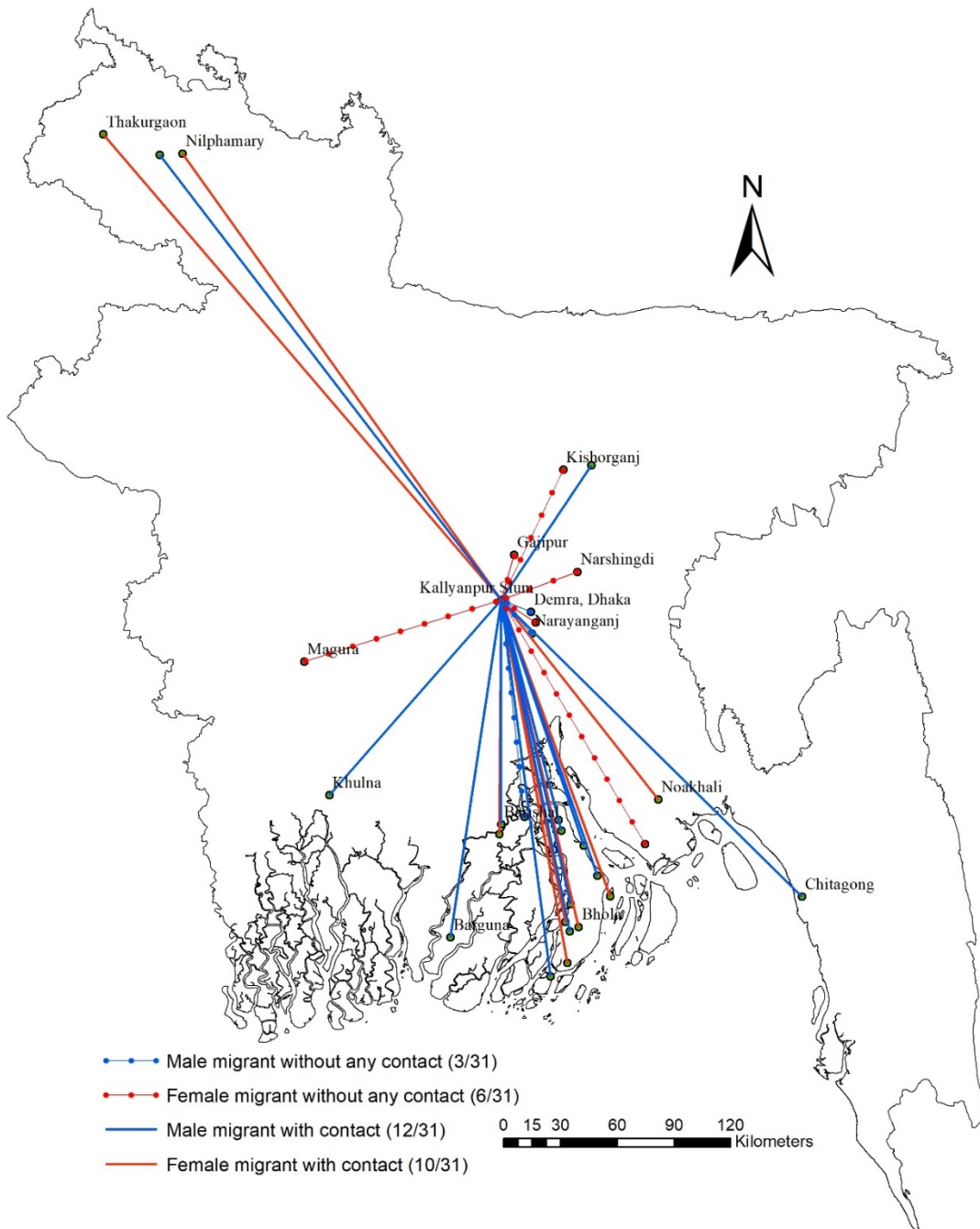
The slum is also visited by outsiders to varying degrees. Transport labourers for instance access the main entrance of the slum in order to collect garbage and plastics for recycling. Many rickshaw

pullers who drop passengers in the nearby residential areas pop into the slum for a quick meal. The restaurants are mostly located on the main arteries and have a reputation for quality meals at a cheaper price. The slum is also accessed by local residents of Kalyanpur Mahalla for cheap tailoring services offered by slum dwellers. Some slum dwellers raise and sell chickens, of the breed known as 'deshi murgi' popular among Kalyanpur Mahalla residents, with customers coming from far beyond the slum. Moreover, many NGO workers have free access to the slum as they perform regular visits and implement various programmes. Most of the people respect NGO workers as they believe that NGOs have helped to improve the water supply and sanitation services in the slum. Some political leaders visit to the slum often to meet with their supporters. Two major parties maintain offices where these meetings take place, and these leaders often listen to the problems of their supporters while expressing solidarity with the people.

It is obvious from the discussion above that the access to the slum is open to a wide range of people who do so for a variety of purposes. For the slum dwellers, there are no controls in terms of who can and cannot access a particular space or service that is being provided. Though it is the norm for slum dwellers to use their designated toilets, tube wells, and bathroom facilities, it is not uncommon for people beyond the designated families to also access these services and facilities, though this access for outsiders is limited and only allowed within the set purpose of the visit. It is not common for outsiders to stay in the slum for longer than a day or night.

While looking at the way in which people move in and out of the slum may suggest that the slum is infinitely open to any outsider, the reality is more complicated. Inclusion and exclusion are balanced in many ways and can be explored by examining the process in which an outsider becomes insider. This process is facilitated through the development and maintenance of social networks, contacts, and relationships. How quickly an individual is absorbed into the slum also depends on the extent to which they are able to engage with the community through various voluntary and community activities.

Figure 4.1: Migration of the respondents from various parts of Bangladesh



A closer look at migration to the slum sheds light on this process (Figure 4.1). Out of 31 respondents, 14 migrated to Kalyanpur slum from Bhola district; the rest were from other parts of the country, including four from the Greater Dhaka region. In most cases (22 respondents), the decision of migrating to and settling down in this particular slum was influenced by the fact of having contacts at the destination prior to the moving. Thus, through the contacts and connections with existing slum dwellers new migrants may gain access to the slum. However, the physical move to the slum is not enough to make them insiders; it is through some sort of active engagement with others that outsiders can eventually become insiders. For instance, Nazia (35, female), who migrated to this slum 19 years earlier with her husband, mentioned,

I was very good at hand sewing, and so my father-in-law, who was already living in this slum, insisted me and my husband migrate here from Thakurgaon. My in-laws thought that I could get a decent job in the garment industry and potentially earn a handsome salary. It was difficult to adjust in the first few months. I didn't know anyone, I was shy, and people would look at me differently. In those few months, I stitched people's clothes for free. I trained some teenagers in stitching as well. Eventually, I started to have conversations with people and learn more about this slum. One day, one of my neighbours took me to a garment factory for potential job opportunity where he used to work as a security guard. I got the job straight away.

Similar stories were told by Shetu (35, female) and Jorina (30, female), who migrated to this slum after their land and homes were submerged by river erosion in Bhola. They knew that there were many people from their respective villages living in this slum and it would not be a problem for them to find a place to stay. It was only after being reassured by their contacts that they made their move in search of work opportunities in Dhaka. It should be noted here that while initially these women moved motivated by the prospect of finding a job, they all ended up being self-employed in the slum. Even Nazia, after eight months of working at the garment factory, left the job over a dispute with her supervisor regarding salary withdrawal and started a tailoring business from her house in the slum. These women highlighted that their self-employment has helped them to extend their social connections in and out of the slum, connections they believe have paved the way for them being absorbed by the slum community as a whole. Nazia, for instance, says,

At first, when I used to work at the garment factory, I hardly had any time to talk to anyone here. I used to start at 8:00 am and finish around 10:00 pm. I had no social life and I couldn't even spend much time with my kids. For the first eight months, I felt like an outsider and wanted to go back to my village very badly. But since I started my own tailoring business, I am more calm and focused on expanding my business. Initially, my customers were my neighbours, but now I get orders from as far as Kalyanpur Mahalla. I feel like I have a strong foothold here now.

However, not every migrant to the slum had prior contacts; some people made their contacts only after the move. Figure 4.1 suggests that individuals migrating to the slum without prior contacts mostly came from close by in the Dhaka region. Of the respondents, nine – six of them women – made the move without any prior contacts in the slum. For example, Rojina (35, female), was living in Magura district when her husband left her alone with their two children. For almost a year, her husband made no contact with Rojina, who was struggling to survive with two children. Someone told her that her husband had married another woman and they were living in Kalyanpur slum, and so she moved there straightaway with her two children in search of her husband. Rojina was not sure her husband was really living there and did not know anyone there either. She waited at Mijan's tea stall just at the entrance of the slum hoping to catch sight of her husband. After waiting all day, she talked to the tea-stall owner; Mijan. Hearing her story, Mijan took her to an old lady inside the slum. The lady, who Rojina came to know as Nani ("Grandmother"), helped Rojina rent a house next door. Although the owner of the house was not willing to rent it to someone who he didn't know, the old lady insisted. Rojina says,

The house owner asked, "What if this lady can't pay my rent?" Nani replied, "If she can't, I shall pay you the rent. I have been your tenant for the last 20 years. Have I ever pay the rent late? I shall make sure that the rent is being paid. Nani has done a lot for me. After a few days, she even found maid work for me.

It was a relief for Rojina to find a place to stay and also a source of income within such a short time period. Still, she continued to search for her husband, eventually finding him in the slum after few weeks, separated from his second wife. He apologized to Rojina and became emotional upon seeing his two children, and so she forgave him and they started to live together as family again,

with the old lady as their guardian, with connections with various local leaders. With the old lady's active support and savings from her maid work over the next few years, Rojina eventually set up a grocery store in the slum.

We can see that it is through these connections and contacts that outsiders can eventually become insiders in Kalyanpur slum. Most of them stay in contact with their families and extended families back home, and whenever they see an opportunity (such as a job opportunity or spare rooms), they actively support their family or community members to move to this slum. It is through these social networks that access to the slum remains open to various people. The increasing number of migrants from diverse geographic origins in Kalyanpur slum is an indicator of this.

However, while access is open and broad, that does not mean it is unrestricted; rather there is a process of exclusion that limits unrestricted access to the slum. New people, for instance, need to be endorsed by local leaders, slumlords, or house owners. Having someone already known in the slum facilitates this endorsement process but in no way guarantees a secure position in the slum. Building a new house or even finding a rental can be extremely hard without this endorsement. When I asked my respondents whether I, as a random outsider, would be allowed to build a house on a nearby vacant plot, they laughed in reply, pointing out the necessity of having connections and pre-approval from local political leaders in order to do so. This control is enacted not only for building new houses but also for internal transfers of ownership. When an owner wishes sell their house before moving out of the slum, with the high number of interested buyers the final say again falls to those influential people (i.e., the slumlords). These transactions are determined not so much by the market but rather by the interests of the slumlords.

The social control through which the exclusion process is maintained is very prominent in the slum. Behaviours inside the slum are highly codified and outsiders are easily identified. It is quite easy to spot someone as an insider or outsider based on how they behave and interact with the rest of the community. This means that apart from the endorsement from local leaders, newcomers must also be accepted by other members of the slum community as one of them in order to become insiders. This acceptance by community members often needs long-term relationship-building and investment in nurturing those relations. Practice such as voluntary services, community work, or self-employment that benefits other members of the community often facilitate and accelerate this

process of acceptance (Image 4.3). Without such practices that are deemed somehow valuable in the eye of the community, it is extremely difficult to gain trust and acceptance among the slum dwellers. While there is a great deal of tolerance in terms of visits from people from outside, at the same time there exists anxiety and suspicion about outsiders. The slum dwellers are extremely wary of outsiders who can potentially be police informants. Outsiders can also potentially be Mastaans or agents brought in to advance the interests of other vested groups. There are examples of cases where slumlords have endorsed various individuals to rent properties in the slum and yet the community maintains distance in terms of interactions with those individuals, suspecting them as either Mastanns (agents), serving the interests of slumlords, or police informants. Abdul (56, male) described a police informant:

You can always tell who these people are. They always wear sunglasses, even at night. They always have their cell phone in their hand, not in their pocket. They often buy stuff from the grocery shops on credit or without paying because no one dares to ask them for the money. They are not us; rather they work against our interest. Based on their false and biased information, the police raid the slum on a regular basis and pick up innocent individuals.

The story of Shorna (38, female) and her husband, Razzak (46, male), can shed some light on the matter of inclusion and exclusion. In their village of Narshingdi about 18 years earlier, their love affair was not accepted by their families or the villagers as a whole. One day they took an impulsive decision to flee, taking the bus from Narshingdi straight to Gabtoli bus terminal, Dhaka, intending to hide somewhere in Dhaka where people would not have a problem with their relationship. Kalyanpur slum, being located close to the bus terminal, was easy for them to find and hide in. But the process was not as simple as they had imagined. Razzak mentions:

We had no contacts in this slum. Neither the leaders nor the community people were willing to accept us. We begged them but they kept pointing to our “expensive”-looking clothes and saying that we were not as needy as the rest of them. Our rich parents would soon get the police to find us and the whole slum would be in trouble because of us.

Shorna and Razzak ended up renting a small room near the slum, in the Mahalla area. Shorna was educated as she had passed Secondary School Certificate (SSC) examinations and was able to get a job with an NGO that was working in the slum. This job allowed Shorna to make connections with the slum dwellers and represent herself as one of them. In Shorna's words:

I taught more than five hundred adult men and women in this slum how to write their name in Bengali and English, which was important for them to be able to sign up for various NGO programmes. I provided free tuition to various children of slum dwellers. I would spend my time in this slum beyond the working hours with the NGO. I helped them form groups and organize various events. People started to like me very quickly.

Image 4.3: Participation in various community work and NGO programmes



It was the NGO programme participants who first proactively asked Shorna and her husband to move into the slum. Eventually, Shorna was welcomed by the whole slum community, who thought it would be beneficial to have her inside the slum. Though the slumlords were still sceptical, they didn't oppose the move either. Shorna is still working for the NGO and is considered as a resource person with broad knowledge of NGO programme implementation. Her husband owns a firewood storage room next to the house they own in the slum.

4.3.2 The diverse use of the space

The slum is used by its residents in a wide range of ways. It is not only used for a cheap residential option but also serves as the basic site for livelihood practices. The physical space of the slum is highly organized and every corner of the slum is used in an integrated manner. While walking

through the slum, I observed a wide range of use of the limited space, such as retailing, wholesaling, manufacturing, public functions, and domestic works. Looking at satellite images such as the one in Image 3.1, it is not possible to get a clear sense of the dynamic and vibrant use of space, but on the ground, these spaces are quite deliberately allocated for multiple uses. The deliberate and intense use of the space, while very well negotiated among the residents, may be difficult for an outsider to recognize. People in the slum know the precise use of every bit of the slum – who belongs where, what belongs to whom, what is private, who has the rights to it, and what is public (and for which public).

Image 4.4: Women's use of public space for income-generating activities



The photo on the left showing a women selling meat on a busy alleyway. It usually takes 2/3 hours to get all the meat sold. Her daughter is helping her to keep the accounts. The photo on the rights showing another women preparing snacks to sell in front of her shared courtyard. The same place is also used by her neighbour to sell home grown chicken and egg.

The physical layout of the slum is the primary site for their livelihood functions. Along with income-generating activities, many other types of activities are vital to slum dwellers' lives. Voluntary work, reciprocal support, networking, searching for jobs, scavenging, and community work are the major types of activities carried out in different parts of the slum. Retailing, the most prominent income-generating activity (restaurants, pharmacies, cloth outlets, jewellery, groceries, mobile phone accessories, etc.) in the slum, mostly involves women entrepreneurs who typically

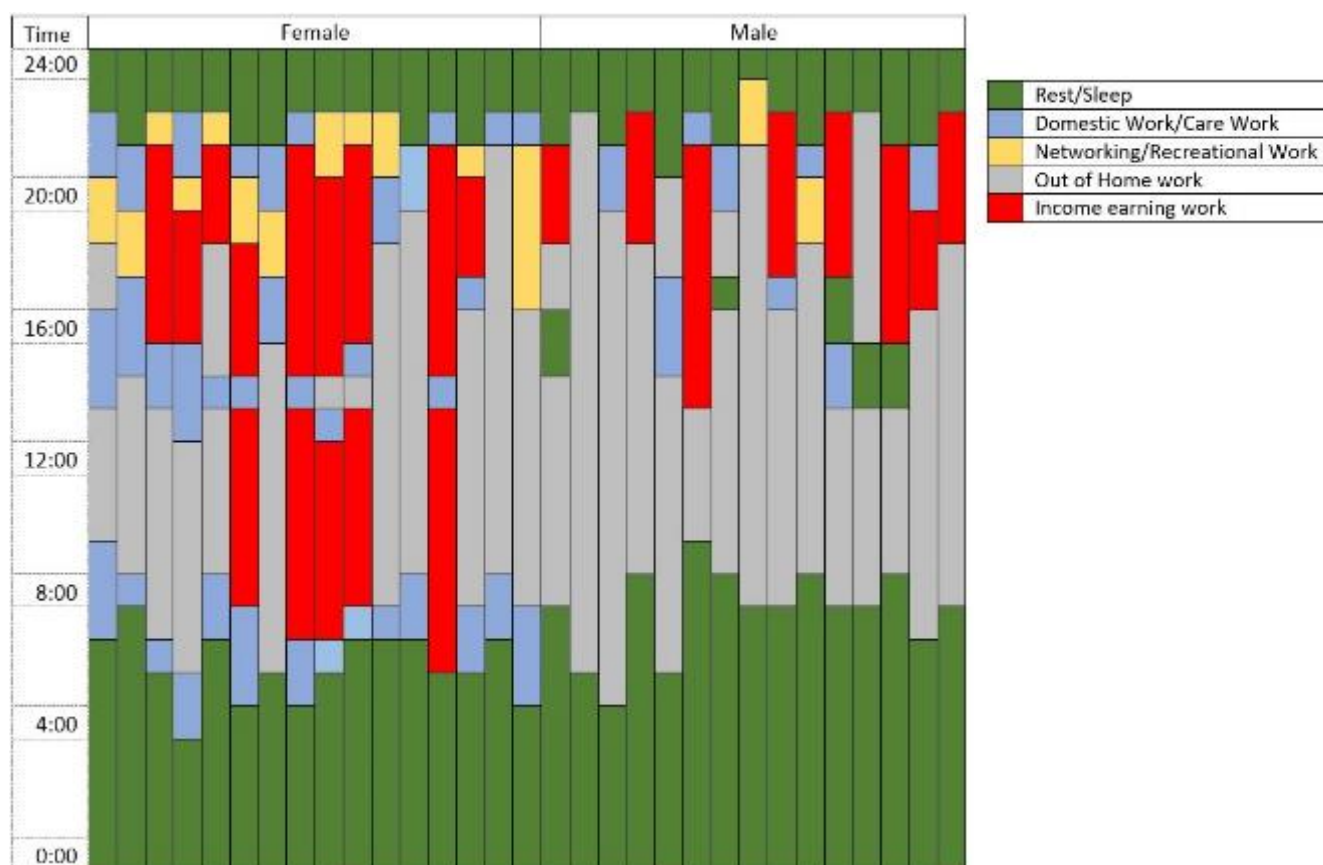
begin operations inside the house, in front of it, or in public spaces (Image 4.4). Women are also largely engaged in production activities such as cutting, sewing, pottery, and food preparation in these spaces. Men's wage-earning activities are predominantly in labour-intensive sectors and in heavy production such as mechanical engineering and automotive repairs; many of these are performed along the major arteries.

The houses in Kalyanpur slum have multiple functions. These houses are not only for residential purposes but rather a pure representation of heterogeneity. One of the interesting aspects of these houses is their role as the sites of multiple working spaces. Almost two-thirds of respondents listed various combinations of voluntary activities, wage-earning work, self-employment, and household care taking place at their respective homes (Figure 4.2). Though the intermingling of voluntary work, recreational activities, social networking, community work, and income-generating work is common in other spaces in the slum, it is mostly the women that link domestic work and income-generating work through home-based self-employment. Such employment typically involves small-scale production and service enterprises that can be accommodated in the limited space of home. There are retailers, typically selling food items, clothing items, groceries, or firewood; there are producers, making clothes or preparing food; there are people offering services, such as running hair salons or doing recycling; there are traditional healers, selling medicine and treating patients at home. In general, these home businesses are characterised by very local linkages with most of the customers being from their own neighbourhoods. The advantages of operating such home-based self-employment are low start-up costs, use of space in the home to maximise economic benefits, elimination of the time and costs associated with work travel, and effective use of human capital (friends, relatives, neighbours) in exchange for remuneration or benefits in kind. Compared to men, women expressed stronger preferences for combining work and home in close proximity, because of domestic and care-related responsibilities.

Homes also work as a primary site for nurturing social relations for women in the slum. Unlike men, who performs socializing or networking mostly at the tea stalls or through playing board games outside of their home, women usually network with each other in front of or inside their homes. Interviews revealed that relationships are cemented (for better or worse) through households devising several strategies to amplify income: renting rooms and space (when

available), ensuring that household members qualify for NGO programmes, and pooling resources to engage in micro-entrepreneurship.

Figure 4.2: Breakdown of types of activities performed in homes



In this figure, a total of 31 columns represents 31 respondents. Each column is further color coded according to the time spent in 24hrs period for various types of activities. The data suggests that both men and women combine various types of activities at their respective home premise. Women especially involved in more income earning activities at home compared to men.

Building houses or using the space for diverse activities in the slum is negotiated among the community members in various ways. For instance, occupying a vacant space and building temporary structures on that space without consultation with the local leaders are both considered serious misconduct. Such actions are denounced by the whole slum community as they think that such actions could potentially ignite existing conflict with HBRI. The local leaders and the whole community are in principle in agreement not to expand their settlements beyond the existing

layout. Shamsul (48, male), a prominent leader owning around 60 houses in Bell-Tola slum, talks about a situation when they took action against such unauthorized uses of the open space.

We are united against any action that will hamper the status quo of this slum. Last year, when Shikdar started to build a new house near the Bell-Tola open field without any consultation with us, we took immediate action against him. We banned him from this slum and he was forced to flee the area. We had some other complaints against him as well.

The local leaders along with the members from different NGO formed groups, hold meetings as required in order to discuss concerns or issues that are raised by the slum dwellers. There are always representatives from each of the sections at these meetings. Building new houses or running new businesses in the slum are major topics of discussion at these meetings. These meetings also play a vital role in making decisions regarding renting properties to outsiders. Apart from decisions on the use of these properties, the establishment of mosques, primary schools, and health care facilities, or any event organized by religious authorities or NGOs, need to be endorsed by the community as a whole.

However, the use of a particular space involving parties from within the slum often requires negotiation between the owner and the tenant. If anyone has any problem with the use of space by other parties, they can always reach out to these local leaders for mediation. Aziz (32, male), for instance, recalls a time when the owner of the house next to him rented the place to a group of teenagers to run a video game store. He says,

The video game store was ruining the kids and youngsters. It was open until very late and crowded every night. I talked to my neighbours, who agreed that we should take this matter seriously and raise our concerns with the seniors and local leaders. The following week there was a highly attended meeting where everyone agreed that this type of business should not be allowed to run in the slum. Our kids are already prone to dropping out of school, and stores like this will further worsen the situation. Though the owner of that property was not happy at first as he was getting high rent from that business, eventually he understood and cancelled the rental.

Small-scale businesses such as grocery shops, barbershops, tailors, pharmacies, restaurants, and tea stalls are not obligated to seek permission from the wider community to run in the slum. These businesses are rather deemed necessary by the slum dwellers and considered to be a matter between the owner and the tenants if they are both from within the slum. Despite these formal and informal arrangements for the negotiation of various uses, disputes arise every now and then, and these are resolved locally. Most are regarding the blocking of someone's access, for instance by mobile vendors, rickshaws, or other temporary structures. Local seniors are treated as mediators in such situations and regarded with high respect, though Abdul, being a renowned mediator, thinks this is now fading. "We used to consider the problems of others first, but now people are very selfish and don't care much about others. They not only ignore the teaching of the seniors but are really apathetic about learning," says Abdul.

Therefore, the perspective put forward by the respondents and local leaders suggests that the use of the slum is not based on individual discretion but rather discussed, argued, and negotiated among various groups in the slum. It is often done in a peaceful way with everyone agreeing on the decision being made, but sometimes this negotiation does lead to disagreements and conflicts.

4.3.3 Sharing Benefit within and beyond

The slum as a unique spatial setting benefits not only its own residents but also the city as a whole. The benefits for the residents are as much about physical wellbeing or property as they are non-material, such as social and community wellbeing. These benefits are relational, extending beyond the immediate physical boundary of the settlements, and connect distant others. By offering cheap labour, goods, and services to the rest of the city dwellers, they support the smooth functioning of the city.

When it comes to benefits for the slum dwellers, it is obvious that the slum offers cheap or sometimes free accommodation options. The first thing people worry about when migrating to big cities like Dhaka is finding an affordable place to stay. The exponential growth in Dhaka's housing crisis has put affordable housing for the marginalised almost out of reach. Kalyanpur slum, like all the other slums in Dhaka, fills that void by offering affordable living to these people. Almost all the respondents in my interviews indicated that they have largely benefited from the comparatively

low rents in Kalyanpur slum. “I can’t imagine living in the Mahalla, wondering how I would afford the rent. A one-bedroom rental, which is not even ideal for my family of four, will cost me at least 5,000 taka [62.5 USD] per month, whereas I pay 1,500 taka [18.75 USD] rent in this slum,” said Bapin (28, male), who has a monthly household income of 8,000–10,000 BDT [100–125 USD] from selling fish and his wife working in garment production. Among all the respondents I interviewed, Bapin has a comparatively decent household income, and this allowed him to live in the Mahalla for a few months during the fire incident in 2016. But not everyone has a decent and regular income like him, and for them the slum is the only option. For instance, Rohima (36, female), who works as a cleaner in a private clinic nearby, had to live outdoors for two consecutive weeks along with her three children after the eviction drive and fire. The house Rohima was renting was demolished and her sister’s house was burnt down, therefore leaving her no choice but to live on a nearby footbridge. She couldn’t afford to rent a house outside the slum and did not receive support from her employer. “The most difficult days of my life,” recalled Rohima. “I didn’t know where my neighbours were. My sister fled to the village. It was like losing all your support – the slum, its people, all in a blink of eyes.”

It is interesting to note that though Rohima couldn’t rent a place to stay due to her lack of financial ability, there were respondents who were denied properties in Mahalla despite having the capacity to pay the rent. For instance, Babla (35, male), despite having a decent income from his driving job, was not able to find a place to stay nearby just because he was a “slum dweller”. Babla says,

The security guard was helpful. He allowed me to talk to the owner of the building. I confirmed with the owner that I would give him the rent in advance. But he kept telling me that he wouldn’t rent us property. He said, “You people will spoil the environment here. All my tenants are gentlemen here and they will not like having slum dwellers living in the same building as them.”

From the accounts above it is obvious that the slum benefits the marginalised community not only by providing a cheap residential option and providing space for livelihood functions but also by accepting them for who they are. There is a wide range of tolerance in the slum for people from various socio-economic orientation and background. Kalyanpur slum did not deny people such as Shorna and Razzak, who were not accepted in their village for being in a relationship. Within the

slum the gender difference is minimal as far as women's involvement in income-generating activities is concerned. Men taking responsibility for household work and women taking control of the household income is a more common scenario in the slum than elsewhere in Dhaka. Social isolation and exclusion from mainstream society have enabled them to generate their own rules, customs, and practices governed not by wider social norms but by their daily needs. Living in the slum, therefore, allows improvisation through the possibility of breaking social stigmas and stereotypes. Living in the slum creates a "being" that is different from "being" in other parts of society. Therefore, many individuals feel safe, included, valued, and cared for in the slum more than they do in any other place, even their home district or place of origin.

This sense of inclusion and social cohesion likely ensures the social and community wellbeing of the people, a non-material benefit offered by the slum. Despite the continuous struggle with incidents such as the eviction drive and fire that bring prolonged periods of stress, the slum offers the socio-physical space for the dwellers to secure their social and community wellbeing. With the beginning of dawn and the coming home of those who work outside, more and more shops on those alleyways get opened. At the end of a busy and hard-working day, the tea stalls of the slums become the focal point of social interactions. The atmosphere changes rapidly after dawn. Lights go on, the children slowly vanish from the streets and the shops get filled with people, mostly men. It is very common to find the old, the young, and teenagers all enjoying movies or TV dramas of their choice at the local tea stall together, with plenty of laughter and chat about the plot of the movie, creating a buzzing environment. There is a passion for cricket as well. During a match, detailed analysis will take place, with round after round of applause with each boundary hit by a Bangladeshi batsman. Women will be gathered together in front of houses, chatting and laughing in a group. Many will be watching their favourite TV serials along with those who do not have their own TVs.

For some respondents, this environment is important to survive. It creates a sense of connection with others, something they would not want to leave by moving elsewhere. Where else they could have imagined an environment like this, where they could set aside their sorrows and forget the misery of the day, at least for a while? Nilufer (59, widow) lost her husband in a road accident about 20 years ago. Her children, born in this slum, are all grown up now and eventually moved

to the Mahalla. They insisted Nilufer lease out the room she owns and lives in to come and live with them in a three-bedroom apartment in the Mahalla. Nilufer could have done that easily, but she didn't. In her words,

I lived with them for a few months, and then I came back again. It's not possible for me to leave this place. The charm of this place is not found anywhere else. I felt suffocated living in the Mahalla. Look at this place – everyone is around, everyone is close. What I need at this age is not affluence but these very people around me, those who I spent most of my life with.

Nilufer maintains a childcare centre in the slum set up by an NGO. These are all children of slum dwellers who see Nilufer and her childcare as of enormous importance. Working couples especially, at a minimal charge, can ensure the safety, security, and education of their children. Like Nilufer, most respondents, despite highlighting enormous problems prevailing in the slum, mentioned '*maya*', an emotional attachment with the slum that is difficult to overcome. Seven of my 31 respondents, despite having the option to move out of the slum, preferred to live in it to ensure their social and community wellbeing, which is fulfilled by the slum community, a factor more important to them than financial considerations. Twenty-one respondents preferred that their children move out of Kalyanpur slum once they grow up but themselves intended to spend the rest of their life there. Most of these respondents had lived in the slum for a long period, and they expressed their concern that they would not feel accepted elsewhere, not even in their village. Hashmot (43, male), for instance, says,

I have an adult daughter. I want her to get married to a man outside of this slum so that no one can point their finger at my grandchildren as "poor". My son will also eventually move once he finishes college. Then me and my wife can rest here in peace. ...Our neighbours are our extended family now. None of our relatives from the village have ever asked how we have been doing since the time of the eviction. It is these neighbours who helped us like brothers. It is clear who are real friends and who are not.

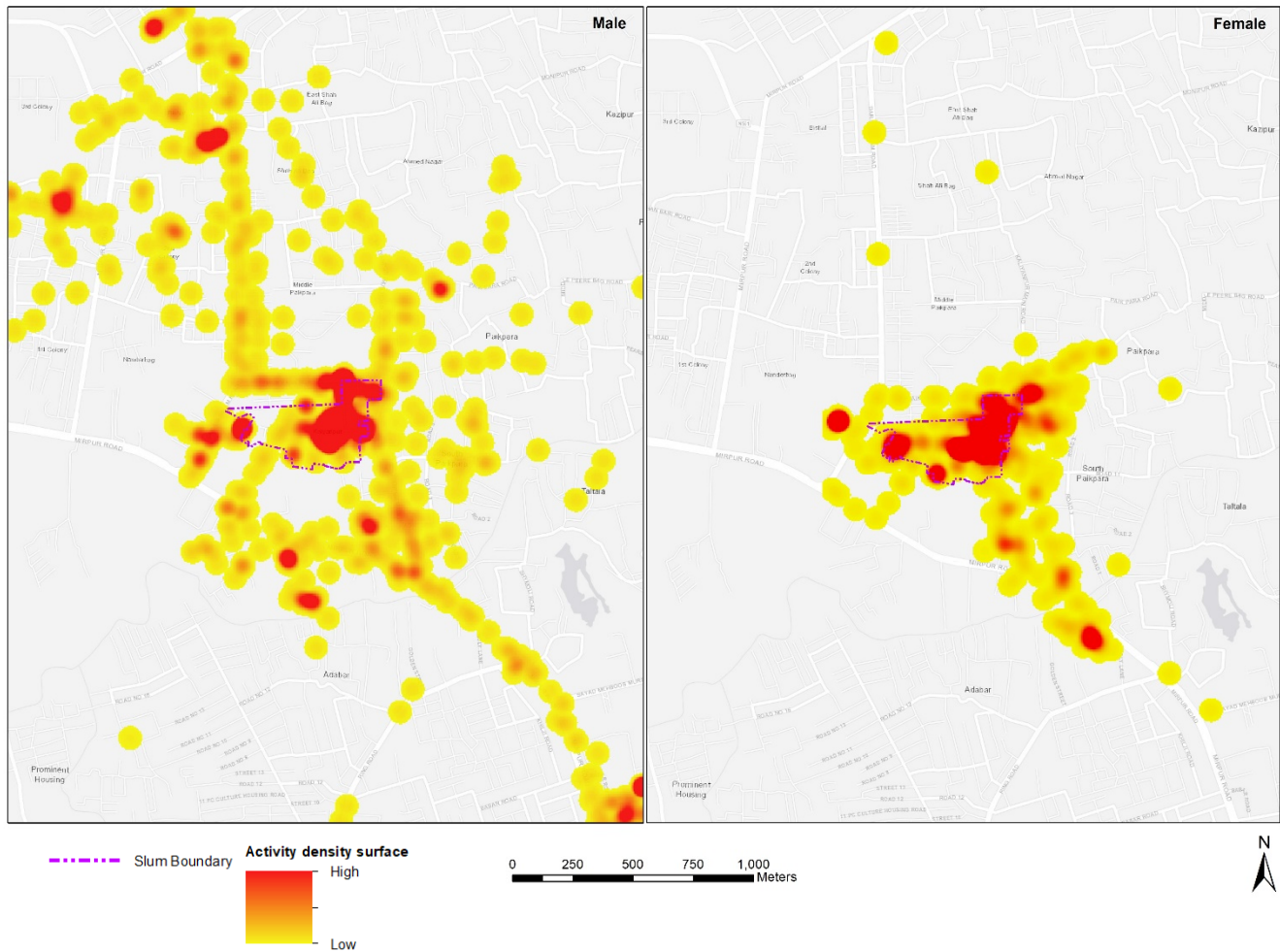
Halima (35, female) added that every year, she and her family go to her in-laws' house in Noakhali for a week to celebrate the Eid festival. Halima, a street vendor selling clothing and cosmetics in

and around the slum area, explained: “After two or three days, I feel very unsettled. I keep counting the numbers of days left before I can get back here. My husband does the same. We don’t know how, but there has been some sort of relationship developed with this place.”

The above accounts suggest that the slum dwellers benefit greatly from the various socio-economic activities they practise in order to fulfil their physical and community wellbeing. By providing a cheap residential option and acting as the primary site for livelihood activities, the slum ensures their physical and material wellbeing. It also does ensure social and community wellbeing by enabling social interaction and creating an inclusive environment. Though these benefits are largely realized by the slum dwellers themselves, there are many other benefits that radiate outwards from the slum and serve various parts of the city. These benefits are largely propagated by the slum dwellers in the way they interact with the city as a whole.

A closer look at the spatiality of their livelihood activities suggests that the connections between the slum and the non-slum area of the city are made by the slum dwellers in their performance of various income-generating activities. These activities have been theorized under the broader frame of “informal activities” by many scholars who have highlighted the contribution made by slum dwellers in offering cheap labour to city residents who otherwise would struggle to meet their need for it. Rather than discussing the characteristics of these activities further in detail, what I am interested in is the spatial extent of their reach. An activity density analysis (Figure 4.3) of the respondents from Kalyanpur slum shows a different spatial scale for men and for women in terms of their daily activities.

Figure 4.3: Activity density surface for male (left) and female (right) respondents



This figure has been generated from the GPS tracked data of the respondents. Instead of showing all the activity points on the map, an activity density surface has been generated using ArcGIS's point density function which allowed to present a summarised version of the activity locations across Dhaka. It is calculated by counting the number of activities clustered within per unit of area (Considered 10m X 10m in this figure). In areas where a high number of activity points/locations are clustered has been presented in red in contrary to yellow where less number of activities are clustered. Rest of the areas on the map have no activity within.

Though most slum dwellers' daily activities are performed within the jurisdiction of Kalyanpur slum, a significant amount is performed beyond its immediate neighbourhood, such as in Mirpur, Gabtoli, Mohammadpur, and Shamoli, particularly by the men. Most out-of-slum activities are mainly in domestic services (e.g., security guard, driver, electrician, housekeeping), manufacturing services (e.g., garment worker), and the transport sector (e.g., tractor/bus driver, terminal operator,

rickshaw/van puller). Slum dwellers offer cheap, quality manufacturing and retail services such as in furniture making, refurbishment of engines, tailoring and window-frame making, largely concentrated in residential areas in the vicinity (e.g., Paikpara, Pinerbug, Agargaon, Kalyanpur Mahalla, Shamoli, and Mirpur). The linear distribution of the activities along some major transport corridor as shown in Figure 4.3 has been resulted from the mobile respondents (e.g., rickshaw puller, driver, street vendor) who travel back and forth between various destinations.

Most respondents mentioned that their contribution in those households is usually recognized and they often receive generous support from these households, such as free meals, new/used clothing, bonuses during festival periods and so on. The demand for maids has grown in the Kalyanpur area in recent times as it has been very difficult to find household help. For example, Shetu (35, female) reported that she works at a four-bedroom apartment in Kalyanpur Tower for BDT 3,500 [43.75 USD] monthly. Since starting there eight months earlier she was further requested by other families in the building to either work for them too or help them find someone else. Though Shetu was not very interested taking on more hours because of the physically demanding nature of the job, she couldn't say no and eventually agreed to mopping and sweeping tasks for BDT 1,000 [12.5 USD]. She was pleased that those families agreed to her requested charge straightaway without any bargaining.

The men's work catchment area is comparatively wider. They find work in a variety of local informal businesses such as workshops, backyard shacks, reconverted buildings, and other business clusters close to shopping centres. It is also easy to sell their labour at Mirpur Bazaar or the Gabtoli bus terminal, both nearby. Many work in the construction and transport sectors, which are the most mobile, with varying work arrangements in different parts of the city on different days of the week. Men are also largely involved in street hawking and vending at different points along Mirpur Road. Many respondents (both male and female) also reported travelling as far as Old Dhaka, Shahbag, or Gulshan to not only sell their products but also purchase raw materials cheaply.

These activities performed by the slum dwellers are, of course, of economic benefit to themselves, but non-poor others also greatly benefit from these activities. Street hawking and vending helps Mahalla people by reducing the distances that need to be travelled for food, groceries, clothing, and cosmetic items. Businesses employing the slum dwellers are also benefited by the flexibility

of arrangements that slum dwellers can offer. For instance, Zillur (23, male) works as a construction labourer for a company in Mirpur Bazaar. Though he was hired to work for four days a week on a multi-storey commercial building construction site, the company leased him to a sister company nearby for additional hours. The labour pooling arrangements between these two firms is made possible due to Zillur's willingness to work extra hours without any extra benefits (the same rate of remuneration was paid to him). This is, of course, labour exploitation, and the employers as a whole benefit greatly from such exploitation. Such labour exploitation is also severe in other industries, especially in garments factories.

Last but not least, the city benefits greatly from the waste-picking activities of slum dwellers. Though there no exact figure is available for the number of people engaged in waste picking, respondents indicated that more than a hundred people actively work as waste pickers in Kalyanpur slum. They gather materials from street piles, garbage containers, transfer points, and dumps throughout the Kalyanpur, Mirpur, and Gabtoli areas, the main dump point being located in Gabtoli. There are several street bins, open transfer points, and open dumping areas in and around these neighbourhoods. The irregularity of waste collection by the Dhaka City Corporation (DCC) authority allows pickers to access waste in search of recyclables. The materials that are mostly retrieved are paper, plastics, and broken glass, with metal scraps being the most prized. Leather scraps, rubber, and bones are often found in these places by the waste pickers. Two individuals who are involved in waste picking informed that they start early in the morning and may go out again after a rest in the afternoon. They have no handcart or bicycle to carry materials, carrying their findings in cane baskets or gunny sacks. Occasionally there are conflicts with other pickers over territory, presumably when someone intrudes upon another's jurisdiction.

Both the interviewees mentioned that they learnt to pick waste from their recruiter, who has a waste collection shop at the main entrance of the slum. They indicated that they earn between 500 and 1,000 BDT per month [6.25-12.5 USD]. They often engage their family members in sorting, cleaning, and selling materials to small waste shops. During the rainy season, waste picking turns into a very difficult task. They cannot sell damp paper or very dirty plastic and must take waste home or to some other place in order to dry it out for a day or two before selling. The capacity to do this depends upon the amount of living space the family has around their dwelling.

Image 4.5: Waste-recycling activities in Kallyanpur slum



There are a series of waste dealers operating small shops and warehouses along the main arteries of Kalyanpur slum (Image 4.5). Mostly owned by local leaders, with some by slum dwellers, these shops and warehouses buy waste from the pickers on a weight basis. On a usual day, these arteries will be busy with many people sorting, counting, and processing waste on the ground for further transportation. The recycled materials are carried by mini trucks, vans, and rickshaws to distant parts of the city for wholesale.

Thus, waste, which has no value to the general residents of Dhaka, is given value by slum dwellers through their act of picking it from various locations. They have not only created a means of making a living from these wastes but also helped to reduce Dhaka's environmental footprint. The waste picking also improves the public health situation of numerous residents around the Mirpur and Kalyanpur area which would otherwise be worse due to the irregularity of waste collection on the part of the DCC.

4.3.4 Performing care work and taking responsibility by the dwellers

Care in Kalyanpur slum is performed and responsibility is assumed by the slum dwellers. They often organize themselves around various care-related activities, sometimes with the help of NGOs but mostly on their own. In the absence of direct intervention on the part of the government to improve the living conditions of slum dwellers, responsibility for the slum is assumed to belong to the community itself. There is quite a deliberate attempt to take care of their living space, a fact that is very obvious while roaming around the slum. Among various care-related activities, waste management, maintenance of the water supply and sanitation services, elevating paths during the monsoon period, and repairing damaged houses, shops, or other structures are performed on a regular basis. While the responsibility of providing various services and facilities is often assumed to belong to the various NGOs, slum dwellers firmly believe that NGO programmes are there for the short term and in the long run, the community has to take sole responsibility for its settlement against all the odds it faces. Borna's (32, Female) statement is very clear in this regard:

NGOs will come and go as they did before. We cannot expect NGO to be there for us for the lifetime. Therefore, we have to take responsibilities of our own. There are many volunteers in the community who believe the same. We try to learn as much as possible from NGO programmes so that we can carry forward our own work and can also teach others how to do things when needed.

When it comes to care, the slum dwellers take meticulous care of their households and the nearby spaces on a regular basis. They keep their homes neat and tidy and put every effort into decorating their living space in a nice manner. Most rooms, despite being made of temporary materials, are decorated with colourful curtains and bedsheets, often with a poster of their favourite celebrity on the door or on a wall inside. Even though furniture is minimal, they prefer artistic designs on their furniture, especially their dressing tables and wardrobes. It is the women who take care of the household's assets, such as through regular cleaning and polishing. Girls are expected to help their mothers in these household jobs. Men often help women in taking care of children, such as bathing them, taking them to school or shopping, and so on. It was quite evident during my fieldwork to see many men cooking in front of their house (Image 4.6, bottom), something that is not very common outside the slum area. In most of these cases, the women work long hours outside the

home and the men take over responsibility for preparing household meals – though it is interesting to note that although men are willing to be involved in cooking there is a significant household preference for the women to be the ones to do the grocery shopping.

Image 4.6: Women doing the grocery shopping (top) and men cooking meals are common in the slum (bottom)



The Bazaar, situated at the entrance of the slum, is full of women customers, especially in the evening when most of them return from work or finish their business for the day (Image 4.6, top). This is where all the slum dwellers do their grocery shopping. Shopkeepers in the Bazaar are predominantly non-slum dwellers who maintain close contact with the slum as their business is

highly dependent on the slum dwellers. Like most of my male respondents, Bapin (28, male) relies on his wife when it comes to the daily grocery shopping:

I come back from work earlier than her. I bring the kids back from school and get them to shower. Meanwhile, my wife returns from work with all the grocery shopping needed. She would often ask me over the phone what I would like to eat before shopping.

...She works so hard at the garment factory that I don't let her do any heavy work at home, such as cooking. She often assists me, but mainly I do the job of cooking.

The reason for women being the main grocery shoppers is explained by both female and male respondents in a similar fashion. Aziz (32, male) delightfully expressed his awe at the capacity of his wife to get a bargain from the shopkeepers:

She can buy goods at a very cheap price, especially fish and vegetables. The shopkeepers won't listen to me and will not reduce the price of things much if I am the customer. She manages to convince the shopkeepers quite easily to give her a bargain. So, it is a benefit if she does the grocery shopping.

This reason was similarly given by all my male respondents. From the women's point of view, the reason is quite similar, but with a different tone. Jorina (30, female), for instance, needed to be at the Bazaar every day not only for household purposes but also to run her restaurant. She mentioned:

It is easy for women to do the grocery shopping on credit. I often buy things on loan and pay back the next week or at the end of the month. The shopkeepers trust us more than the men.

Shetu (35, female) mentioned that it is easier for the women to ask for groceries at for lesser amounts, unlike men who will be flatly denied any such request by the shopkeepers.

So, the household care work in the slum is performed by both men and women in various combinations. This tendency is also noticed in terms of neighbourhood and community care work. It is common for slum dwellers to help each other out by reciprocal work and care. During times

of crisis, two or more extended families may cook together to support each other. Sharing meals with neighbours is common in various situations. Providing care work for the elderly and children of the neighbours is well practised throughout the slum.

The slum dwellers also take care of the slum by performing maintenance activities on various services and facilities in the slum. In most situations, in-house expertise is used for repairing tube-wells, water collection points, and toilets. Saiful (40, male, happily unemployed), for instance, became an expert in fixing tube-wells and does this job every now and then for free. He maintains good relations with a hardware store employee across the main road, who is willing to lend him the equipment needed to disassemble the troubled tube-well. The families sharing the service contribute towards the cost of any parts that may need to be purchased, which Saiful then purchases from that hardware store at a discount. Like Saiful, voluntary labour is offered by many people who have knowledge in, for example, building/repairing houses or decorating community centres for various functions. During the monsoon, the slum is submerged, causing severe problems for walking throughout the slum. People from their respective sections take the initiative every year to put bricks on top of these flooded passages in order to make walking easier for pedestrians. Building goodwill, trust, and recognition among others often motivate such voluntary labour.

Image 4.7: Community-managed waste collection van (left); city corporation-managed waste collection van in Mahalla (right)



There are also examples of collective care mechanisms at Kalyanpur slum. It was amazing to see the collective efforts people put into waste management, a service chronically overlooked by the authorities. The community has developed a mechanism of shared waste management where five pedal vans were purchased from contributions made by the slum dwellers (Image 4.7, left). Each household also provided 50 BDT (USD 0.60) per month to employ five individuals from the slum to collect waste from each household on a weekly basis. If any household is not capable of paying the contribution they can perform additional tasks such as cleaning the tube-well and the toilet premises. The NGO DSK brought in water supply and sanitation services and facilitates this waste collection mechanism. Borna (32, female), a community organizer, facilitates this process. She expressed the importance of having such a system in place to challenge the general image held by Mahalla people that the slum is a dirty place:

People think we are dirty. This slum is dirty. But this perception is not right. We do whatever we can to keep the slum neat and clean. We don't want people to see trash here and there in this slum. We already face enough ignorance from outside people.

As far as responsibilities are concerned regarding the management and maintenance of the slum, these are assumed by various committees and their leaders for protests or movements against eviction, NGOs for the provision of various services and facilities, and by individuals when it comes to maintenance of those services. In recent times, however, slum dwellers' trust in the local leaders and committees faded after their failure to prevent the eviction drive and their inactivity during the fire incident in 2016. They also understand that NGO activities are limited to micro-credit and awareness-raising programmes. The community thus holds itself mainly responsible for most slum affairs. Interviews with the respondents suggested that they were not very optimistic of being recognized by the government in the near future. In particular, in expressing their suspicion of HBRI they conveyed the importance of taking care of and being responsible for the slum themselves.

We are on our own. As citizens of this country, we expect rights equal to those of the Mahalla people. Instead, we are being treated like dogs. That's why we have lower expectations of the government. They don't need to provide us with anything, except for security of tenure. We can arrange the rest of the things on our own. (Abdul, 56, male)

Examples of collective responsibility in the slum are abundant. Responsibilities are often assigned to selected individuals to perform duties on behalf of the community. For example, the toilets, which are of vital importance to the community, are managed by specific individuals among the families sharing those toilets, with responsibility shuffled among the various households. Decisions over the management of the toilets are taken at community meetings. Borna, one of those assigned with this responsibility, works voluntarily as toilet manager for a particular facility in her section. She runs a small tea stall while keeping an eye on the toilet complex. While describing her work, she mentioned:

This toilet is shared by a large number of families. That means it needs to be managed. It needs to be kept clean in order for others to use. It is the individual's responsibility to keep the toilet clean, and I just make sure that they have done their job right. I also train people in how to use the toilet and keep the space clean.

Borna also informs the community immediately if there is any problem with the toilet, making it easy and quick to find the right solution. She doesn't wait for DSK or other NGOs to intervene for small problems; instead, she finds the right people who will be able to fix it. By doing this voluntarily, Borna believes that she is fulfilling her responsibility to the community.

4.4 Commoning in Kalyanpur slum

Having discussed various ways in which the key five aspects are dealt with by the slum dwellers, I argue in this section that in carrying out these daily activities they are actually commoning the space of Kalyanpur slum. The commons identikit proposed by Gibson-Graham suggests that commoning can be performed (to maintain commons or create new commons) on enclosed resources and unmanaged resources. When a property or resource is enclosed or unmanaged, commoning is a process of making its access wider and shared, its uses are managed by a community, its benefits are widely distributed to the community and beyond, its care is performed by community members, and its responsibility is assumed by the community. Keeping this in mind we can see that commoning started at Kalyanpur slum from the day when the first group of the migrant community being displaced by the river erosion in 1988 settled here.

At the beginning, this 13-acre plot of land was vacant and unmanaged under the ownership of HBRI. By building their makeshift homes there, the migrant community started the commoning process. Their rapid migration to the land was possible due to its unmanaged status. But with increased migration, houses were built, paths were created, and open spaces started to be used. In this way the migrant community was gradually transforming this unmanaged land into a commons. The migrants being predominantly of a particular geographic origin (i.e., Bhola District), this settlement was quick to be known as the “Bhola Colony”. This label helped the settlement control its unrestricted access because it came to be seen as mostly for people from Bhola District. The use of the land was initially restricted for residential purposes, but with time more and more functions were generated to meet the demands of a growing community. By activating the retail function of the land, the community was commoning the space to secure livelihoods. It was also the period when the newly adopted neoliberal urban policies created demands for wage labour, and in offering labour on a day-to-day basis, the migrant community was benefiting businesses beyond the Kalyanpur area. In the absence of any government or NGO interventions at that time, the community cared for themselves and their space. They piled dirt on low-lying ground to elevate the land in order to make it liveable, work that needed to be done every year before the monsoon to avoid flooding. They assumed responsibility for the commons that they were intentionally or unintentionally creating. Abdul’s recollection of his past in the slum indicates that the slum used to be tightly organized around the role played by the local leaders and the community as a whole.

Against this background, the state, in an act that could be thought of as “seizing the commons”, conducted several eviction attempts in 1996 and then a successful eviction drive in 2003. Migrants who appropriated vacant land to construct the commoning community and the commons over a period of nearly ten years were made landless in a day. The destructive approach to the slum was influenced by an understanding of property from the perspective of ownership, not from the perspective of commons. An ownership-based understanding of property leads to identifying this migrant community as ‘illegal’ settlers. As these settlers do not hold the title or own the property, the authorities deemed it ‘okay’ to evict them. However, this eviction drive couldn’t stop the commoners for long from going back to commoning the property: to commoners, ownership is not vital, care is.

Proving Linebaugh (2008) right in his assertion that “commoners think first not of title deeds, but of human deeds”, the migrant community returned to the property within a year. This time, their commoning practices were informed by their experience of eviction, an experience that has significantly shaped and differentiated the “commoning now” in Kalyanpur slum from the “commoning then”. The slum dwellers have learned to access various channels to seek assistance against eviction threats, similar to what Cameron and Gibson (2005: 4) have called subjects “always in the process of becoming”. They have come to know about the roles that could potentially be played by various stakeholders such as NGOs, the police, political parties, MPs, and even some of the local leaders in their own community. The narratives of respondents such as Hasina Begum and Abdul indicate their increased understanding regarding the importance of a collective and united stance against enclosure based on their previous experiences. The way “commoning now” is different in Kalyanpur slum is this added element of knowledge and experience of responding against enclosure. One-off events such as the protest against the local MP and going to the High Court to ask for a stay order, along with ongoing efforts such as not interacting with suspicious outsiders or maintaining liaisons with various NGOs, the press, and human rights organizations, indicate a different commoning strategy than before, as seen during the 2016 eviction drive. The 2016 drive was bigger than the one in 2003; however, this time the authorities were not able to evict the entire community due to the timely enacted strategies by the commoners and their allies.

Despite various evictions threats and fire incidents taking place every now and then, commoning continues in Kalyanpur slum. Accounts of their daily lives suggest that the commons they continue to create is neither open to all or restricted for others. Access to the slum is wide and shared, balanced through the process of social networks, existing power dynamics, and prevailing social norms and values. The increasing number of migrants in the slum from various parts of the country indicates its comparatively wide accessibility. It was observed from the accounts of the respondents that having contact with someone from the slum makes the move to the slum easier. However, the cases of Shorna-Razzak, Rojina, and Nazia indicate that the slum is not a ‘free-ride’ for all, and without access to the proper channels it can be extremely difficult for outsiders to rent a property, let alone build a new house. The scarcity of space also plays a vital role in excluding

people from the free ride. These cases also suggest that it is in “being in common” with the slum dwellers that access to the slum is widened.

The slum is used by the community for a variety of purposes. The commoners actively combine the space of private functions with the space of public functions, as noted in the multifunctional role played by their houses. The use of public spaces in the slum is also multifunctional. Retail work, recreational work, and the production and consumption of goods and services are mingled in space in a way that makes it difficult for outsiders to distinguish what is private from what is public. Such mingling is probably unique in urban informal settlements. It should be also noted here that these uses are negotiated among the commoners. What the leader Shamsul mentioned about banning Shikdar for building unauthorized houses without consultation, or what Aziz did to stop the business of the video game store, indicates various processes of negotiation regarding the use of the slum. In general, community members do not welcome any use of their space that is not broadly endorsed by them, similar to the insistence of Gibson-Graham, Cameron, and Healy (2013) that a community is always in negotiation over its ethical concerns, especially regarding the use of and care for the commons and for the commoners.

The benefits of the commons in the case of Kalyanpur slum are distributed among the slum dwellers as well as beyond. The slum benefits its residents such as Bapin, for example, by ensuring his physical wellbeing in providing a cheap residential option. Like most respondents, it also benefits the whole community by enabling their livelihood functions. Accounts from Rohima and Babla suggest that the slum also benefits its people by being inclusive and nondiscriminatory toward its residents. Like Rohima or Babla, most people living in the slum struggle to be accepted by the Mahalla community due to the negative stigma attached to them for being “poor”. By accepting these people for who they are, the slum as a commons ensures their community wellbeing. For Nilufer and Halima, it is “being in common” with others that created a sense of attachment to the slum that they can hardly leave behind. Therefore, despite having better living options outside the slum, they prefer to be here, to be in common.

Gibson-Graham has argued that the benefits of the commons have to be realized beyond the commons. By looking at the spatiality of its residents’ livelihoods, we have seen that the benefits of the slum reach beyond the jurisdiction of the slum and neighbourhood and connects distant parts

of the city. Shetu's account suggests that she is doing a big favour to those families who are in immediate need of maids. By offering her labour for this physically demanding role, Shetu was also able to develop and maintain a healthy relationship with those families. A similar point has been noted in the case of Zillur, who was flexible enough to be in various informal arrangements with multiple employers. By being flexible to take up any job that would otherwise be difficult to fill, the slum dwellers benefit the rest of the city.

We have also seen that the benefits of the slum radiated out through the act of waste picking. What two of my respondents were doing was transforming waste into commons through the act of picking, sorting, and selling it. This is similar to what Zapata and Campos (2015) noticed in the case of La Chureca, a domestic and industrial waste disposal site in Managua, Nicaragua. Like the waste pickers of La Chureca, my respondents in Kalyanpur slum are also involved in the process of seeing the value in waste in the form of reusable and recyclable materials, and in doing so they are benefiting the city in reducing its environmental footprint, especially given that the city waste collection system is not regular. These commoners, apart from bringing environmental and public health benefits, also bring individual and collective benefits to a wider waste business community by creating exchangeable value for the waste as food, construction materials, toys, and so on.

When it comes to care and benefit, we have seen that care for the slum is performed by the slum community and the responsibility by and large is assumed by the community itself. In general, care of the slum is performed by individuals helping each other, where neighbour helps neighbour – they share cooking facilities, share meals among themselves, provide loan and crisis support to each other, and so on. We noticed from the accounts of Bapin, Aziz, and Shetu that they learned and employed necessary strategies, such as women doing the grocery shopping in order to ensure the best care for their family. Men help in household activities, especially cooking, which is not very common in Mahalla. Again the women going to Bazaar and doing the grocery shopping is quite opposite to the typical Mahalla practice of household care work. What is important from these accounts is the tendency among the commoners to try things that will work in favour of their circumstances, things that they would otherwise not try if they were not living in and with this commons.

We have also seen that responsibility for the slum has been assumed collectively by the community and performed in various individual and collective actions. Through the active leadership role played by individuals such as Borna and Shorna, NGOs are encouraged to initiate programmes that have wide access, use, and benefit for the slum community. Initiating NGO programmes in the slum is not as easy as it might sound because of the informal (e.g., verbal) approval required by the slum lords and influential persons. Borna, Shorna, and many others like them take on the responsibility of bridging the gap between the NGOs and local leaders by successfully transmitting and interpreting communications between the two. The programmes that the NGOs are interested in pursuing in the slum are often not in line with what the leaders want from the NGOs. Any programme that may significantly hamper the interests of influential persons in the slum will not be allowed to be initiated. By taking responsibility, often voluntarily, commoners like Borna and Shorna practice commoning through enabling negotiation between the NGOs and local influential leaders.

Table 4.1: A commons analysis of Kalyanpur slum

	Access	Use	Benefits	Care	Responsibility
Commons	Shared and wide	Negotiated by the community	Widely distributed to community members and beyond	Performed by community members	Assumed by community members
Kalyanpur slum	<ul style="list-style-type: none"> ▪ In between open access and restricted access 	<ul style="list-style-type: none"> ▪ Used and negotiated by the slum dwellers ▪ Used by non-slum dwellers to a limited extent 	<ul style="list-style-type: none"> ▪ Physical, social and community wellbeing of the slum dwellers ▪ Distributed across the city 	<ul style="list-style-type: none"> ▪ Performed by the slum dwellers 	<ul style="list-style-type: none"> ▪ Assumed by the slum community ▪ Assumed by NGOs ▪ Landlords/House owners

Therefore, the ways these five key aspects – access, use, benefit, care, and responsibility – are negotiated in Kalyanpur slum, correspond to many of the criteria of a commons set out by Gibson-Graham et al. (2013) as presented in Table 4.1. The various accounts of the respondents presented in this chapter suggest that the ongoing commoning process is important for the slum dwellers in

order to ensure their wellbeing. My argument in this chapter is that Kalyanpur slum is an urban commons made and remade through the daily activities of the commoners, i.e., the slum dwellers. Their commoning practices involve as much their livelihood activities as their collective movement against eviction drives and fire conspiracies. By combining these, what they are doing is moving a state-owned piece of land into a form of commons. Their commoning practices are not always peaceful – they involve various elements of conflicts, contradictions, and active negotiation, a vital characteristic of urban commons. Most of the time, while these commoning practices are not intended as standing up against the enclosure attempts of the state, just by doing what they do on a regular basis they are emancipating the space of commons from being enclosed. Whereas these practices have long been overlooked and conceptualized as “flawed”, “subordinated”, and “not enough” in most discourses around urban informal settlements, by noticing these very local, place-based, everyday practices of slum dwellers, I have highlighted their collective agency.

4.5 Conclusion

Informal settlements such as slums are a challenging yet important topic of study, especially in cities of the Global South where a large proportion of urban dwellers are residing in informal settlements. Urban planners, policymakers, and scholars have been dealing with informal settlements in almost all of the Global South’s large cities for a quite long time now. Despite extensive experience in dealing with informal settlements, most existing interventions targeting slums are destructive and inhuman in nature. As I discussed in chapter one, such an approach is largely shaped by a flawed or incomplete conceptualization of this unique spatial setting. Many contemporary scholars, mainly from postcolonial, post-Marxist, and postcapitalist schools of thought, have called for a new line of investigation of informal settlements that is informed by the very local and daily lived experiences of the slum dwellers. I also discussed in chapter two that commons thinking can fill up the knowledge gap in understanding informal settlements. I have paid particular attention to the commons framework proposed by Gibson-Graham et al. (2013) that allows for investigating informal settlements without necessarily being puzzled by the discussion of the formal/informal dichotomy or capitalism.

Based on the theoretical foundation of commons discussed in chapter two, I have explored the commoning process in a case study slum in Dhaka, Bangladesh, in this chapter. The slum under the study is about 30 years old and has been subject to frequent eviction drives and fire incidents throughout its existence, like most other slums in the city. The site of the slum being owned by the government is a standard example where the prevailing destructive approach to slums is highly visible. With a brief historical overview of the slum, I have highlighted the existing socio-economic conditions of the slum dwellers that were shaped by several evictions drives from 1996 to 2016 and a major fire incident in 2016. Incidents such as these carry significant meaning for the people living in the slum and have affected them physically, mentally, socially, and communally. These incidents without any doubt have created a sense of the betrayal of many local leaders, frustration over the role of state, and uncertainty about the future of the slum dwellers. On the other hand, these incidents have also made them see the importance of being united and acting collectively. Their individual and collective daily activities mark their intentional and unintentional efforts to common this land against the enclosing force of the state.

The daily activities of slum dwellers have been studied in various disciplines for a long time now, with particular attention being paid mostly to their income-generating activities under the domain of informal sector and informal activity. However, their income-generating activities do not take place in isolation from other activities. In this chapter I have explored their activities from the commoning lens, an approach that has allowed me not only to focus on the income-generating activities but also all sorts of other work, such as voluntary support, reciprocal help, household care work, and community work. This is because it is not only income-generating activities that ensure the physical, social, and communal wellbeing of these individuals but a combination of various work, an argument made by Gibson-Graham et al. (2013) in their theorization of a diverse economies framework. In the context of an urban informal settlement, this argument is more crucial. Being isolated from mainstream society, this voluntary work, social work, care work, and community work bind these people together towards fulfilling their material and non-material needs.

Therefore, by exploring all these activities what I have argued in this chapter is that Kalyanpur slum is an urban commons, and it is these daily practices that make and remake this commons. In

practising these daily activities, the slum dwellers are commoning the space of Kalyanpur slum that otherwise would have been enclosed by the state. Commoning practices are not deliberate most of the time but they are some of the time. For example, in renting or building houses they may not deliberately be commoning the space against enclosure but rather fulfilling their most urgent demand for housing. However, when chanting slogans all together on the burnt ground of the slum against the local MP, they are deliberately claiming their right to space. I argued in this chapter that their commoning practices involve these regular, day-to-day activities along with one-off events during the crisis. These activities are what make them commoners who are in common with each other through the practices of commoning, without which neither the slum nor the slum dwellers would exist as they do now.

To explore slum dwellers' daily practices, I have used the toolkit proposed by Gibson-Graham. The main idea here is to explore these daily practices of commoning around the key topics of access, use, benefit, care, and responsibility. Gibson-Graham argued that a commons will have wide and open access, its use will be performed by the community, the benefits will be distributed to the community and also beyond it, and its care and responsibility is assumed by the community. By exploring how these five aspects are negotiated in Kalyanpur slum, I have answered the first research question. I have shown that the space of Kalyanpur slum functions as a commons. This argument has also partly contributed to research question two by highlighting the social characteristics of this commons. Kalyanpur slum may not be a commons in the sense of Ostrom's "common pool resource" but more like an urban commons that is marked by contradictions, which would be further discussed later in this research. However, we can already see that this commons exists in relation to the state, in relation to the pressure of the capitalist city, and in relation to high density and diversity. It is a commons that neither is open to all nor has a strict boundary of membership. Rather, there is a negotiation process that governs inclusion and exclusion in this commons.

Now that I have explored the sociality of this commons, it is time to investigate the spatiality of commons. Without paying attention to the spatiality of the commons, it may seem like the sociality discussed in this chapter is evenly practised throughout the slum. As if the whole slum is a homogenous spatial unit that has a clearly defined boundary within which the commoning

practices are performed uniformly. In reality, commoning is not uniformly practised throughout the slum, as the degree of commoning varies according to the spatial configuration of the space. Therefore, though the slum has a clearly defined external physical boundary¹⁰, there emerge various internal boundaries of opportunities and struggles. These boundaries are often re-appropriated by the commoners. This is an aspect of commons that is highly relevant in the context of the urban informal settlement but drastically missing in contemporary discussions and analyses of commons. I address this gap in the next chapter. I will investigate the ways in which the socialities discussed in this chapter are materialised spatially. In doing so, I shall analyse the link between the commoning practices and the spatial configuration of the common and explore the varying degree of commoning across the common. This exploration will help to identify sites where commoning is highly visible and also the corresponding characteristics of those sites. This exploration would also help to identify the characteristics of the kind of commons that Kalyanpur slum is. In order to do that, I shall employ a spatial analysis technique, that of space syntax, which allows for the systematic investigation of spatial configuration at the micro-level.

¹⁰ Please note that ‘physical boundary’ not necessary means a physical structure separating the slum from rest of the areas in Kallyanpur context. Though some parts of the slum are separated by walls and fences, there is no physical barrier between the slum and the non-slum areas. Physical boundary here means the demarcated area known as the limit of the slum.

Chapter 5 : The Spatialities of Commoning in Kalyanpur Slum

5.1 Introduction

In this chapter, I shall explore the spatialities of commons. More specifically, I analyse the ways in which the commoning practices of the slum dwellers are manifested spatially. The boundary of the commons is an important indicator of the spatial expression of the commoners. The boundary marks the edges between ‘ours’ and ‘others’, the limit of their shared belongings. Boundaries can be expressed in many ways, physical boundary being one of them. Some sort of physical demarcation is always needed to distinguish between what belongs to ‘us’ and what belongs to ‘them’. This is why the institutionalist scholars are very pragmatic when it comes to the boundary of the commons. They argue that a clearly demarcated boundary is needed to establish the rule of inclusion and exclusion. However, I have discussed in chapter two that urban commons are not like Common Pool Resources (CPR) and the matter of openness and closeness remains highly contested and negotiated. Therefore, it is difficult for urban commons to have an easily identifiable boundary.

If the boundary is not something that can be identified firmly in the context of urban commons, then how commoning practices are manifested spatially? What are the other ways in which the spatiality of commons are expressed, because we know that urban commons are fundamentally socio-spatial? This is a vital question to be asked in the context of informal settlements. It is not because we need to find the forms of spatial expression other than just physical boundary as urban commons do not necessarily possess one. In fact, when it comes to informal settlement such as Kalyanpur slum, there is an easily identifiable physical boundary. The 13 acres of land on which Kalyanpur slum is situated is clearly identifiable on maps. The limit set by this physical boundary clearly contains the commoning practices of the slum dwellers on a daily basis. But how much this clearly demarcated physical boundary tells us about the spatialities of these lived experiences of the commoners? The sociality discussed in the previous chapter helps us to reimagine Kalyanpur slum as a commons, however, very little we have come to know about the ways in which these socialities are expressed spatially within the physical boundary of the slum.

I deem this exploration very important to achieve the overall objective of this research: to reimagine urban informal settlements beyond the hegemonic notion of a ‘dysfunctional space’. Investigating the spatialities of Kalyanpur slum can significantly improve our understanding of the intertwined influences between commoning and the commons. The space of Kalyanpur slum is not a single space but a collection of heterogeneous spaces. The spatial configuration of the slum, i.e., the way these internal spaces are connected and related to each other, impacts the way people organize these places around various daily activities or commoning practices. The practices we have seen in the previous chapter often involves changing the configurations of these internal spaces. While widening the access to the slum or sharing the use, benefit, care, and responsibility of the commons, the slum dwellers also organize their space and re-appropriate the spatial configurations. Therefore, the commoning practices of the slum dwellers correspond with the spatial configuration of the slum and by reading the spatial layout of the slum, it is possible to explore the ways in which these commoning practices are manifested spatially. By doing so, I argue in this chapter that the commoning practices involve changing the internal spatial configuration of the resource. Therefore, for urban commons, it is not always meaningful to see where the physical boundary is but to see what is happening inside the commons.

In order to perform this exploration, it is important to read the spatial configuration of the slum. I have found the Space-syntax approach particularly relevant in this exploration and therefore adopted its techniques. Apart from the relevant theoretical propositions where the agentive and the constructive notion of space is recognized, Space-syntax is well equipped to be applied at various spatial scales ranging from a micro-level individual building to the macro-level urban-regional analysis. It is beyond the scope of this research to elaborate on the methodological process related to Space-syntax, which could be found in Al Sayed, Turner, Hillier, Iida, & Penn, (2014), Hillier (1997), Hillier and Hanson (1984) and Vaughan (2007). A brief overview of the theoretical background of Space-syntax has been discussed in chapter two previously. As a reminder, it is sufficient to mention here that the theoretical foundation of the space-syntax method contrasts with the conceptual separation of form and function underpinning the traditional urban design paradigm. In space syntax, space is rather perceived as intertwined between form and function, bearing greater resemblance with critical social theories of space (Hillier, 2008). Space-syntax thus offers a tool for looking at spatial configuration to analyse a space’s various functional potentials.

In the following sections, I begin with a discussion of the techniques involved in measuring the spatial configuration with space syntax. Then I highlight how the proposed technique has been used for this particular case study of Kalyanpur slum. Once the spatial configuration of Kalyanpur slum is read through various quantitative measures, I have organized the rest of this chapter according to two main arguments. Firstly, I argue that commoning practices involve changing the internal spatial configuration of the resource. I have compared the spatial configuration of the slum between the year 2001 and 2018 and discussed the commoning practices that have influenced these changes. Secondly, commoning practices are not uniformly practised across the common, rather they vary according to the configuration of the space. By exploring the current spatial configuration and corresponding activities at various spaces, I have shown that most integrated spaces are likely to host most of the commoning practices and vice versa. This exploration has also enabled me to identify the type of spaces that supports commoning in informal settlements.

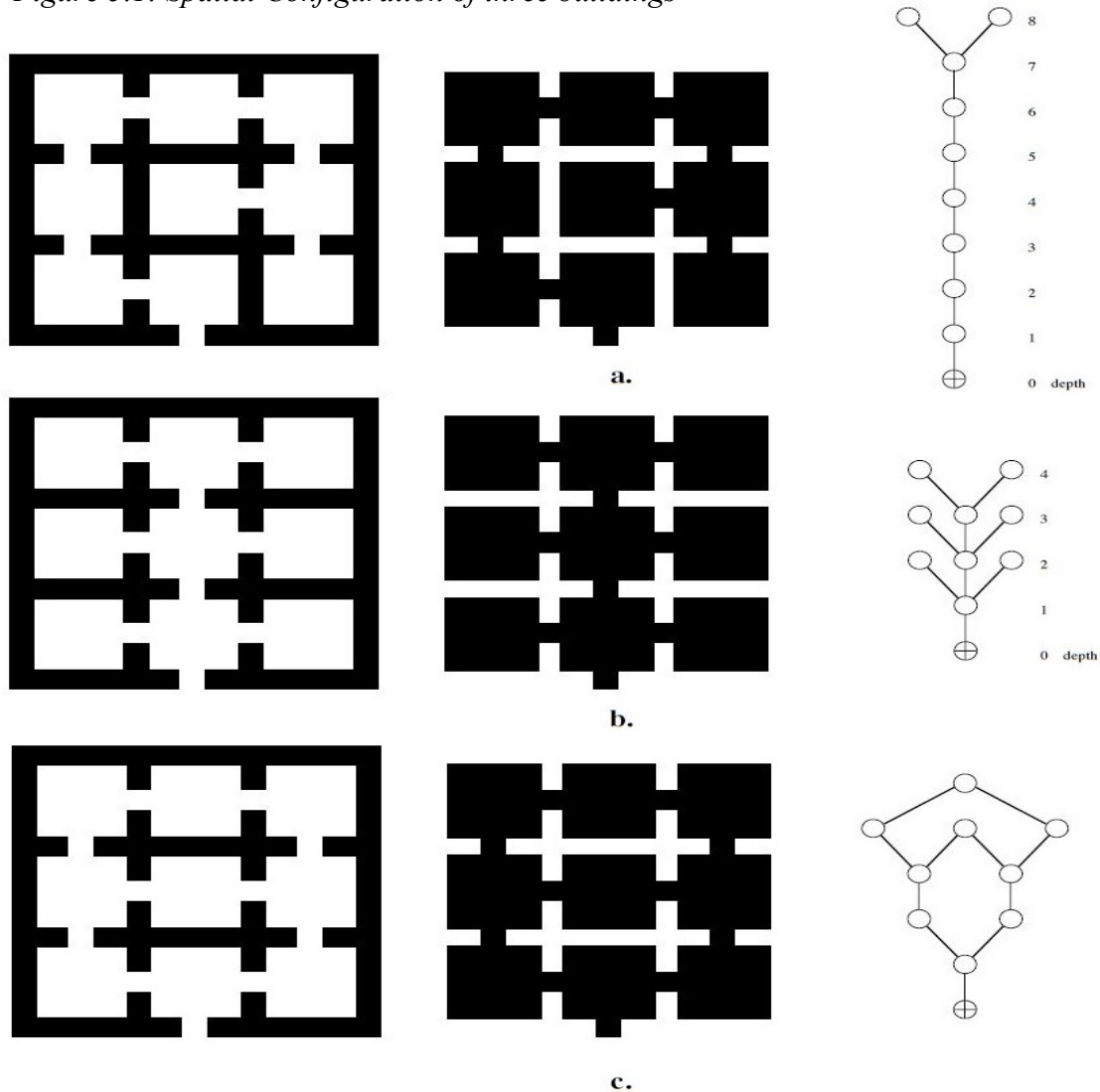
5.1.1 Technique of reading the spatial configuration

A series of tools and models are provided by Space-syntax to analyse the spatial configuration. The underlying concept of these models is to think of social interactions influenced not by the size and shape of the space on which they take place, but rather by the spatial configuration of the space. What is meant by the configuration of space can be understood by the following example of a simple building consisting of nine rooms.

There are three columns and three rows presented in Figure 5.1 where the rows represent three different schematic buildings (a, b, and c) and the columns represent their built elements, spatial elements, and spatial configurations. The first column represents the physical/built elements of these buildings where the whole building and each of the nine rooms in the buildings are bounded by black frames with spaces of the rooms represented in white colour. This is typical of representing building layouts and we can also notice the entrance/exit connecting those rooms. The second column, shown in black, corresponds to this layout presented in the first column. This second column is the spatial pattern of these rooms, showing the exact connections between rooms. If we pay attention to these first two columns of these three buildings, we can notice that the basic physical structure and cell division among these buildings are the same including similar patterns of adjacencies between cells. The number of entrances and exits are also the same. The only thing

that is different among these three buildings is the location of cell entrances/exits. According to Hillier (1997), this one difference is enough to produce various patterns of movements and encounters among a collection of individuals inside the building. He argued that the dissimilarity in the location of room entrances is critical and creates different patterns of permeability which in result influence the way these rooms are navigated by a group of people.

Figure 5.1: Spatial Configuration of three buildings



Source: Hillier (1997)

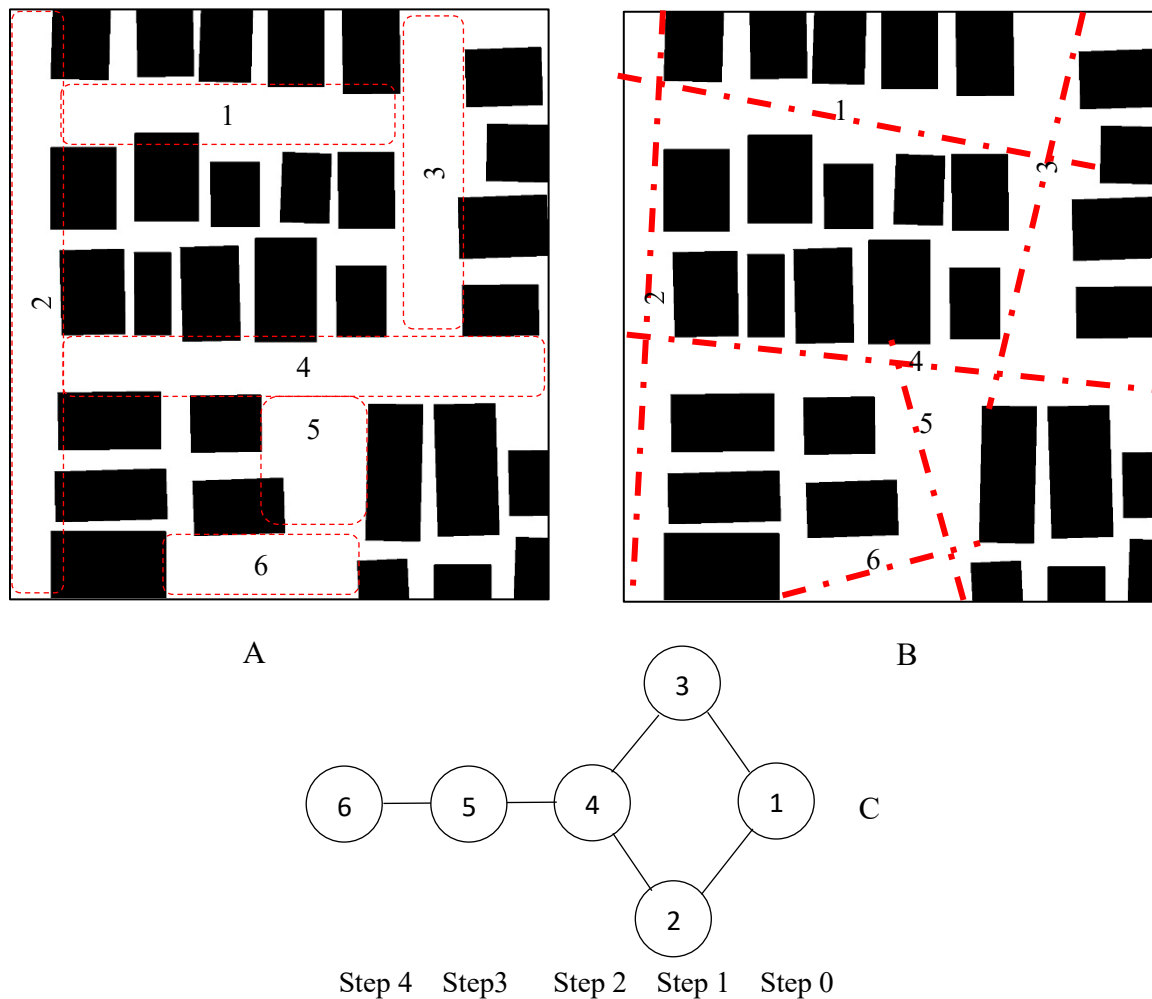
The third column represents this critical factor on a graph network where we can see that the configuration of these three buildings is entirely different. In the graph representation, each of the

rooms has been shown as a node and the configuration, i.e., the connection between the rooms, has been shown as a link. This is topology-based representation where the connections are of vital importance, not the size or shape of the rooms. This is, according to Hillier's (1997) conceptualization, the representation of the 'spatial configuration' which in this particular case, is near perfect linear sequence for the first building (a), and for the second and third building (b, c) the graphs are more branched with strong central spaces. The numbers on the right side of the graph indicate the number of steps required to go from the main entrance to other rooms in the building. For the first building, there is a room which needs eight steps to be reached from the main entrance. For the second and third building, none of the rooms are more than four and five steps away respectively from the entrance. In the network language, this number of steps is also known as depth. Depth can be calculated for an individual node as well as the average depth of the entire network, from the configuration of the network. Depth indicates how closely integrated the spaces (rooms in this example) are with each other. According to Hillier's argument, the difference in depth makes the condition for encounters, congregations, interactions, and avoidance of people entirely different.

The concept of spatial configuration mentioned in the above example is also relevant in the context of urban settings. The only difference is that in context of a building, we have a clear demarcation of space with each room being separate from others by the wall, whereas in the case of a city or neighbourhood, such demarcation is often difficult and subjective. To overcome this challenge, the proponents of Space-syntax have proposed to divide the urban space into small units. It is suggested that these units should be meaningful and small enough to be perceived by a human as single locations. For instance, in Figure 5.2, the building footprints of a hypothetical neighbourhood have been presented in black and the space in between these buildings has been presented in white. The white space represents the overall space of the neighbourhood available for people's movements and interactions. This whole space has been divided into six units as shown in Figure 5.2 (A). In Space-syntax each of these units is represented by axial lines, created by drawing the fewest and longest straight lines of sight and physical access (Figure 5.2/B). Axial lines, which are similar to lines of sight, thus represent each space of movement in the urban environment. These intersecting axial lines represent connectivity among the units of space and form the so-called space-space topology or axial map. From the constructed axial map, the

adjacency relationship of different spatial units can be represented by a network, where the nodes represent individual well-perceived spaces while links represent interconnections between spaces. The overall spatial configuration is then analysed by calculating various network properties of the graph based on how these units of spaces are connected to each other (Figure 5.2/C).

Figure 5.2: Spatial configuration of an urban space



Based on the network graph, various measures of spatial configuration could be calculated such as connectivity, depth, integration, choice, and so on. Each of these measures indicates various aspects of the spatial configuration. The most-used measure, integration, indicates how integrated each space is in relation to all others within the system and has been found relevant for the scope of this study. Through this measure, spaces are ranked from most integrated to most segregated.

Integration is usually indicative of the likelihood for people to be in a space and is read as corresponding to the rate of social encounters and retail activities (Hillier, 1997). Highly integrated spaces are likely to be occupied or used by more people in a natural setting (e.g., regular pedestrian movement in the urban environment). Research on Space-syntax has found highly integrated spaces also happen to be spaces of high accessibility/flows and therefore spaces of high business and retail activities. For instance, Dawson (2003); Desyllas & Duxbury (2001); Parvin, Min, & Beisi (2007); Wang (2009) among many others have shown that the pedestrian movement on urban streets is closely linked with the spatial integration of urban space. The result of their analysis suggests that the observed use of space is significantly correlated with the measured integration value. On the other hand, segregated spaces are found to correlate with spaces that favour quiet situations, such as residential use.

In order to understand how the integration value of a graph network is calculated, it is important to understand two simple concepts: connectivity and depth. Connectivity is a useful measure that could be easily derived from the axial map by identifying the number of lines directly connected with the given line. In general, higher connectivity values of a space, indicates the central tendency of the space in the overall system. Depth, a measure that has been mentioned earlier, indicates the number of neighbouring line within a given number of steps. Depth can be global or local based on the number of steps taken into consideration in its calculation. For instance, in Figure 5.2 above the connectivity value of space 1 is 2 as space 2 and space 3 are direct connections with space 1. The global depth of the network would be 11 ($1*2 + 2*1+3*1+4*1$) deriving as the sum of the product of step multiplying the number of nodes for each step. Local depth of the network would be 4 ($1*2 + 2*1$) for radius = 2 as the sum of the product of step (within 2 steps) multiplying the number of nodes for each step. Compared to connectivity and depth, integration calculation is slightly more complicated. It involves the calculation of shortest path from one space (or nodes/axial line) to all the others. Shortest or longest is defined based on topological distance, the number of steps or turns required to reach from one point to another. The shortest the distance of a space from all other spaces in the network, the higher the integration value of that space. The equation for calculating integration value is the following:

$$\text{Integration} = \frac{1}{\sum_k D_{ik}}$$

Here k is the node for which the integration is calculated and D_{ik} refers to the shortest path between i and k . Integration can be calculated on different scales limited by the number of changes of direction, or the radius, from radius 1 (R_1) to an infinite number (R_n). When $R=n$, it is a global measure of integration showing how deep or shallow a space is in relation to all other spaces. A common radius used to measure local integration flows is R_3 , which highlights a localised structure and has proven to be effective in understanding micro-scale spatial structure and human social activities (Hillier, Penn, Hanson, Grajewski, & Xu, 1993; Jiang & Liu, 2009; Penn, Hillier, Banister, & Xu, 1998).

Local integration, global integration, and connectivity are the three important measures that can be used to further analyse some configurational properties of the spatial system, such as intelligibility and synergy. Intelligibility is calculated based on the correlation between connectivity value and global integration value of the system. It is defined as the degree to which a space perceived or seen by the user, made up the whole system (Al Sayed et al., 2014; Hillier, 1997; Mahmoud & Omar, 2015). It expresses the ease of understanding the global structure of the space from a given local position. High intelligibility is often a good indicator of the system being easily navigable by offering to see and understand the relative position of a space within the whole structure. Hillier (1997) expressed intelligibility property of a space as:

An intelligible system is one in which well-connected spaces also tend to be well-integrated spaces. An unintelligible system is one where well-connected spaces are not well integrated, so that what we can see of their connections misleads us about the status of that space in the system as a whole.

Synergy is also a similar measure like intelligibility with difference that it is a measure of correlation between the global and local integration value. The synergy measure of a system has derived from the observation that the internal structure of the local system is related to the larger system in which they are embedded. Usually there is linear relationship between the global and local integration values which indicates a well-configured interface between the global and local movements. For instance, high synergy of an urban street system will indicate that a busy local street will also be a busy global street. The best way of calculating synergy in an axial map is to first calculate the global integration that indicates how deep or shallow each line is from every

other line in the system and then to calculate the how deep or shallow each line is from all lines up to three steps away ($r = 3$). The corresponding coefficient value of the correlation between these two measures indicates the level of overall synergy of the system.

In this research, I have used the free software package depthmapX (2017) to develop an axial map of Kalyanpur slum and have calculated various measures such as connectivity, local integration ($r=3$) and global integration ($r = n$) to get a sense of the overall spatial configuration of Kalyanpur slum. These three measures have been used to calculate configurational properties such as intelligibility and synergy of the slum's spatial system.

5.1.2 Methods

In order to read the spatial configuration of the space of Kalyanpur slum, the first task is to generate the axial lines through the open spaces of the slum. This has been done by first converting the buildings shapefiles (.shp) of Kalyanpur slum into AutoCad drawing file format (.dxf) using ArcMap 10.4, because the software used for deriving the axial lines, depthmapX, is not compatible to work directly with shapefiles. Once this data conversion is complete, it is important to set the extent of analysis in order to contain the axial lines. The distinguishable morphology of Kalyanpur slum compared to its surrounding area has made this task comparatively easy. After having the area of analysis identified within which the houses/structures are contained, the next task is to generate axial lines through the available open spaces from the building footprints (after doing some minor data conversion and processing). As I am interested in public spaces, I examine an axial map of the slum produced by drawing axial lines through the gaps between houses. The white spaces between the houses as shown in Figure 5.3 are available for movements and hence included in the map. Some white spaces, such as around the HBRI quarters which are surrounded by physical barriers (e.g., walls, fences), result in no movements through these spaces and hence are excluded from the map.

Generating axial lines through the open spaces can be done automatically in depthmapX where the user points out the areas for which the axial lines are to be generated (outside space of the houses). depthmapX then generates every possible axial line making a large volume of total axial lines. From a large number of axial lines it is possible to generate fewer axial lines which are then suitable

for performing axial analysis. Figure 5.4 shows the minimized number of axial lines for the study area, where each of the lines is equivalent to a small unit of space that is connected to another and therefore forms the spatial configuration of the slum. Once the axial lines generated, it is possible to calculate various measures such as connectivity, depth, local integration, global integration, and so on based on their topological properties. Following these procedures, intelligibility and synergy scores of the slum have been calculated for two different periods: one for the 2001 slum (data produced from the Google Earth Engine historic image, the earliest available image is of 21st March 2001) and other for the 2018 slum (Building shapefiles downloaded from www.openstreetmap.org). A comparative analysis of the intelligibility and synergy scores of the slum between these two periods indicates the change in spatial configuration of the slum that has taken place over the 17 years period.

Local integration ($r=3$) have been particularly used to explore the correspondence between the level of integration and the degree of commoning practices. The reason for choosing local integration measure over the global integration to explore this correspondence has been mentioned earlier. Previous studies have shown that local integration is the best representative of the localized spatial configuration of the system and has been proven effective in understanding small scale human interactions. The axial map in Figure 5.8 represents the axial lines according to their respective local integration value. From this map, it is easy to identify the areas of higher integration and areas that are segregated from the system. At this point it is important to remind ourselves that the integration measure is only a model deriving from the graph analysis based on space-space topology. The modelled highly integrated spaces from such analysis may not exhibit intensive level of actual activities. The highly integrated spaces therefore, from such analysis, have to be understood as the spaces where most of the interactions are likely to occur or possible to take place. However, a validation by comparing the modelled integration score for various spaces with the actual level of activities/interactions at those spaces is always needed to understand how well the model corresponds with the empirical data.

A combination of personal observation and GPS tracked activity location data of the respondents have been used to explore this correspondence between the local integration and the actual level

of commoning practices. Correlation analysis has been performed to see if the correspondence is statistically significant.

Once the internal spatial configuration is analysed, it provides us with three valuable insights regarding the spatialities of Kalyanpur slum. The first insight we gain is the spatial manifestation of commoning practices. We see the relationship between the commoning practices and the consequent change in spatial configuration of the slum. This relationship is vital to argue that the spatialities of urban commons are not necessarily manifested through a clearly defined physical boundary but can also be expressed in the way that the internal spaces of the commons are organized. The second insight we gain is by correlating the commoning practices with corresponding spatial configurations. By doing this we can identify the characteristics of various spaces in Kalyanpur slum (e.g., highly integrated, least integrated, and segregated). Such correlation allows us to see the type of space that supports commoning the most. And last but not the least, analysing the spatial configuration enables us to identify the potential space of opportunity and struggles. We can see the perceived as well as the experienced space of contestation and ongoing negotiations. These insights as a whole help us to answer the research question two and subsequently to counter the homogeneous image about the space of the slum, the one that often led to the destruction of some of its critical spaces without understanding their dynamics and strategic importance to the slum dwellers.

Figure 5.3: Spaces within the slum to draw Axial Lines

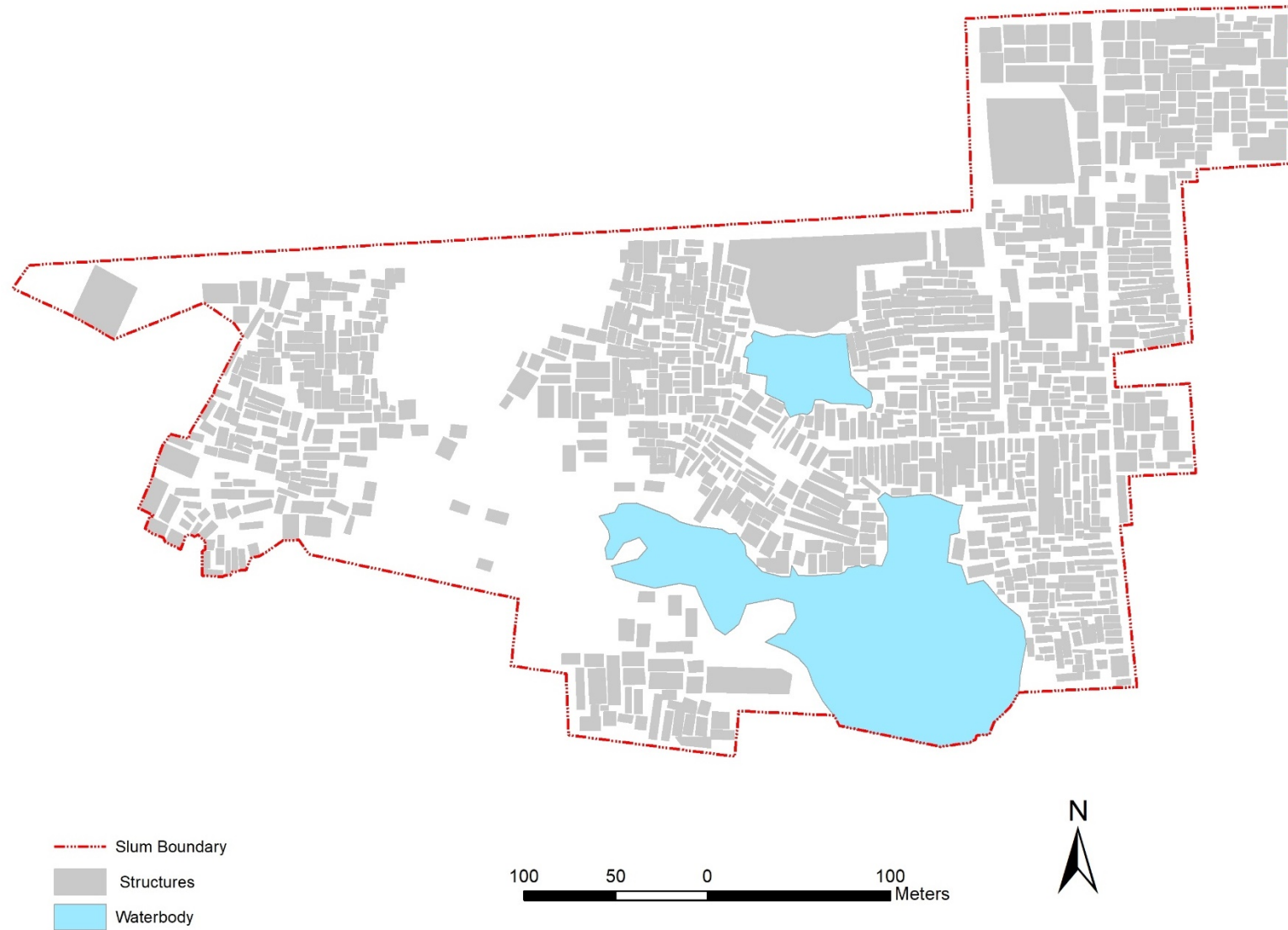


Figure 5.4: Minimized Axial Lines through the open spaces of the slum



5.2 Manifesting spatialities through changing the configuration

The spatial configuration of Kalyanpur slum has changed over time since its establishment. At the beginning in 1988, this 13-acre low lying land was full of native bush and flooded by rainwater throughout the year. It is quite obvious to imagine that the spatial configuration of this space was significantly different from what it is now. The whole 13-acre plot of land was like one single unit of space, no one was occupying this land and no use of the land was registered at that time. But this scenario had started to change since the first migrant community built their makeshift houses. The moment they started to clean up the area by cutting the native bushes and elevating some parts of the land to make it suitable for building houses, the spatial configuration of the space started to change with it. The increased number of migrants over the next 2 years from 1988 to 1990, changed the spatial configuration at a significant level. With increased numbers of houses being built, their spatial organization created spaces for movements, interactions and various social and economic activities. With the emergence of various activities, the land which used to be a single, homogenous spatial unit, has been transformed into a collection of spaces connected to each other through alleyways, paths, convex places. Therefore, the spatial configuration of the slum as it is now is largely shaped by these commoning activities that have transformed these 13 acres of land into a commons. Most of these changes, however, have taken place after the eviction drive of 2003 when migrants from various parts of the country settled in this piece of land.

It is not only commoning that took place over Kalyanpur slum over this long period of time. In parallel to these commoning activities, HBRI has continued their enclosure effort on this common. The rapid transformation of the space into a common through various activities of the slum dwellers created enormous stress for the authority (i.e., HBRI), who saw this land going beyond their control and have taken various measures to enclose the space. Several gated communities were established for the HBRI workers during 2005/2006, including a high-rise building that has been built in recent times (see Image 3.1 and Figure 5.5). Apart from enclosing the space through building structures, HBRI has also conducted several eviction drives since the very beginning of the slum. These actions including the fire incidents have changed the spatial configuration of the slum. The eviction drive of 2003 demolished section seven entirely, changing the configuration of

the space drastically. The Bazaar, a major activity hub of the slum dwellers has been razed into the ground several times, changing the spatial configuration of that part of the slum.

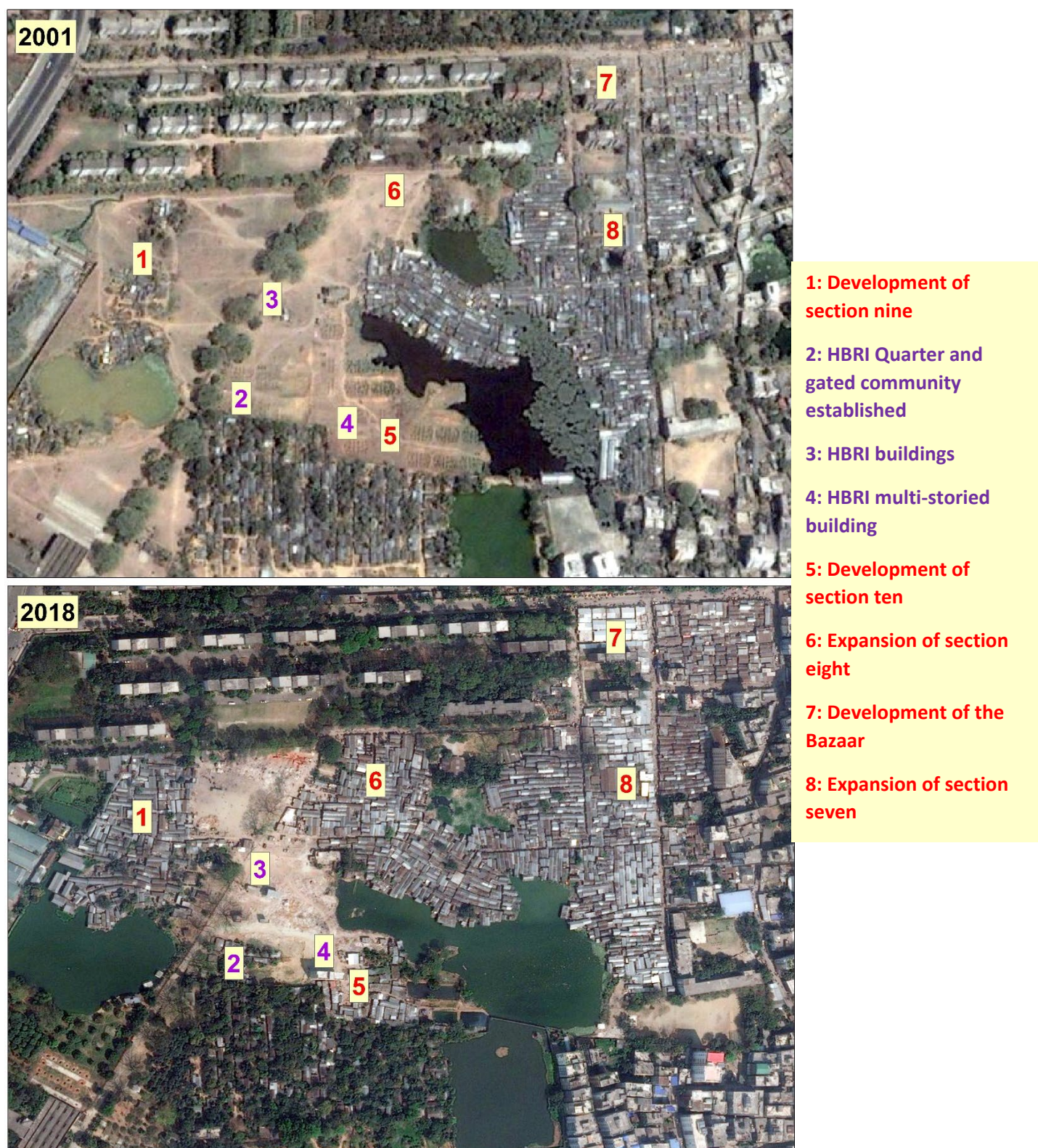
Figure 5.5 presented below summarizes the commoning and enclosure attempts that took place between 2001 and 2018. A total of eight major changes could be detected from the satellite images of the slum from these two periods. The numbers on the map in black represent the configurational changes made through the enclosure attempts of HBRI and the numbers in yellow shows the configurational change made through the commoning activities of the slum dwellers. It shows that the entire sections 9 and 10 have been developed on Bell-Tola field over these 17 years. Also, section 8 expanded, largely to the north and west. The Bazaar (number 7) was not quite complete in the 2001 image having very small numbers of shops with temporary structures, whereas, by 2018, this Bazaar has evolved more as a distinctive feature of the area. The area marked by number 8 on the map has grown significantly. This area is known as section 7 of the slum has mostly grown after the 2003 eviction.

The configurational change of the slum made through the reactive measure of HBRI is also apparent from the images. Numbers 2, 3, and 4 show that the intent of HBRI to develop the physical structures is clustered around the Bell-Tola field. Number 2 on the map is the area where the gated quarters has been established for the HBRI staffs. This part is protected by the fence with paved road connecting the quarters with the main road at the south (Image 5.3). A multi-storey building (number 4, also see Image 5.4) has also been built by HBRI in recent years along with some paved structures (number 3) almost at the middle of the Bell-Tola field. However, these buildings have not been used for any purpose by HBRI so far. My interviews with the respondents suggest that the development of physical structures at the vicinity of slum are largely the reactions to the expansion of the slum in last few decades and reflection of the intent to grab the land from the slum dwellers.

5.2.1 Changing Intelligibility and Synergy Score through commoning

Now that we have noted some of the major physical changes that took place in Kalyanpur slum, in this section we shall quantify these changes through the measures of spatial configuration.

Figure 5.5: Change in land cover in Kallyanpur slum



Source: ('Kallyanpur Slum', 23.47.48 N, 90.21.59E, 2001 and 2018, Google Earth)

The land cover change shown in Figure 5.5 is the direct result of a collection of commoning and enclosure activities by various parties (e.g., slum dwellers, local leaders, HBRI, police, and so on). These practices have changed the spatial organization of Kalyanpur slum since its establishment. Intelligibility and synergy scores are two direct measures of spatial configuration which I have calculated and compared below for the year 2001 and year 2018. In order to do that, the axial map of the slum has been generated from the Google Earth Historical image of the slum of 2001. Once the axial map was generated from these data, intelligibility and synergy score have been generated based on the space-space topology of the study area and compared.

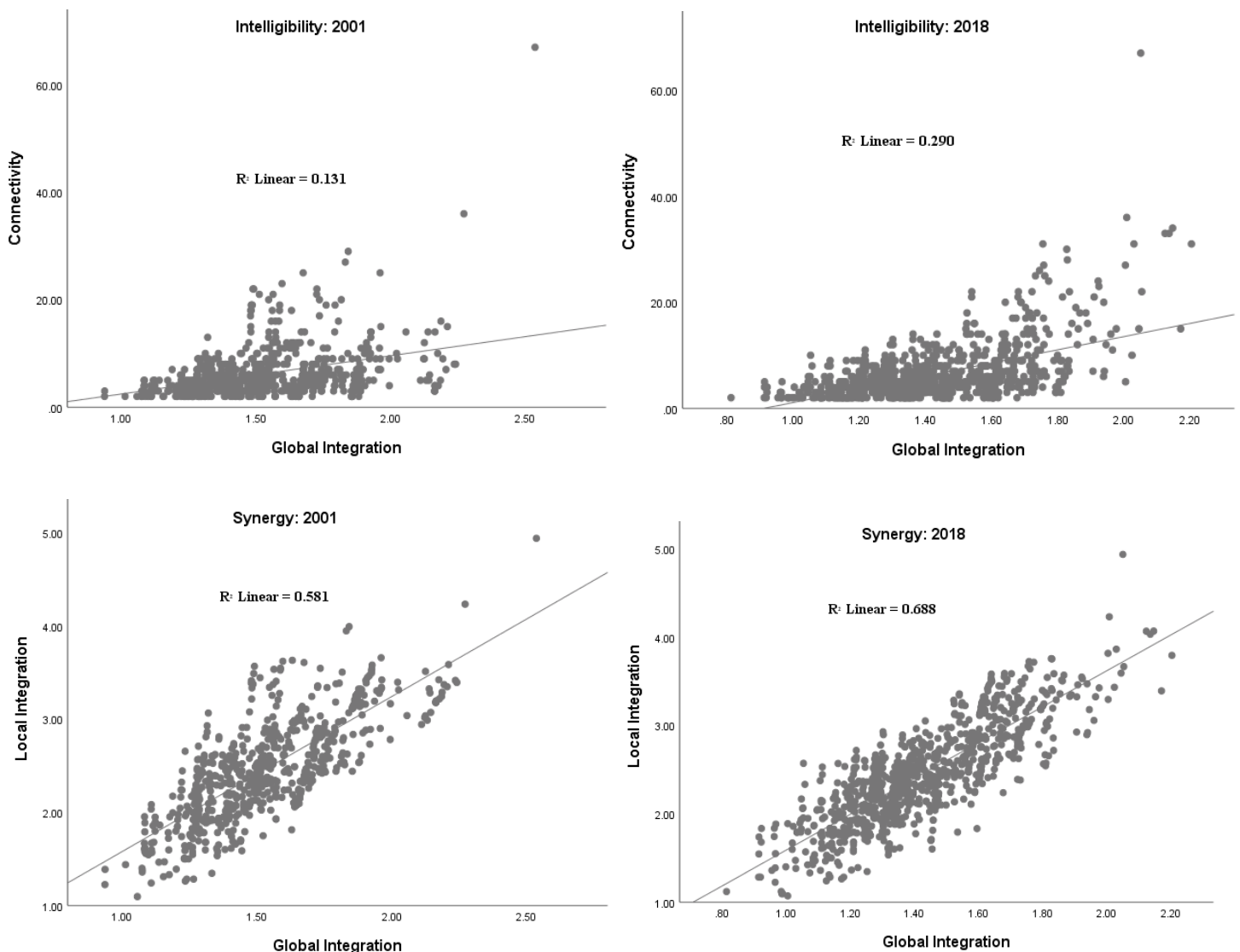
Table 5.1 summarises some basic spatial configuration measures of the slum based on the data of 2001 and 2018. The table indicates that the number of axial lines generated is larger in 2018 compared to 2001, which makes sense as the space has become more fragmented into a collection of spaces with the increased number of houses and blocks in 2018 than it was in 2001. The average connectivity value also increased from 6.29 connections per line to 6.39 connections per line within this period. This is also related to the above-mentioned reason where the increased number of structures created paths and passages through those structures resulting in increased connectivity with the main alleyways. However, the average local integration and global integration of the space have been reduced slightly which indicates the emergence of rather isolated or segregated areas within the system. The development of Section 9 (Belt-Tola), Section 10, along with several gated communities by HBRI at the southern side of the slum has largely influenced this process.

Table 5.1: Statistical summary of the spatial configuration of Kalyanpur slum

	2001 Axial Map	2018 Axial Map
Number of Axial lines	683	945
Average connectivity	6.29	6.39
Average Local Integration	2.47	2.45
Average Global Integration	1.54	1.42
Intelligibility (Global Integration vs Connectivity)	$r^2 = 0.131$	$r^2 = 0.290$
Synergy (Global Integration vs Local Integration)	$r^2 = 0.581$	$r^2 = 0.688$

Figure 5.6 shows the extent to which the intelligibility and synergy; two important properties of spatial configuration have changed over the last 17 years. The intelligibility score of the slum has increased by 122.13% (from 0.131 to 0.29) and the synergy score has increased by 18.41% (from 0.581 to 0.688). An increase in these two properties indicates that the slum has evolved as more organized space over time. The expansion of the entire Section 8, the largest section of the slum has not been haphazard, rather it followed the existing organizing logic of the overall configuration. The emergence of various activity hub and the construction of structures along those local hubs have increased the overall intelligibility and synergy score of the common.

Figure 5.6: Comparison of Intelligibility and Synergy measures of the slum between 2001 and 2018

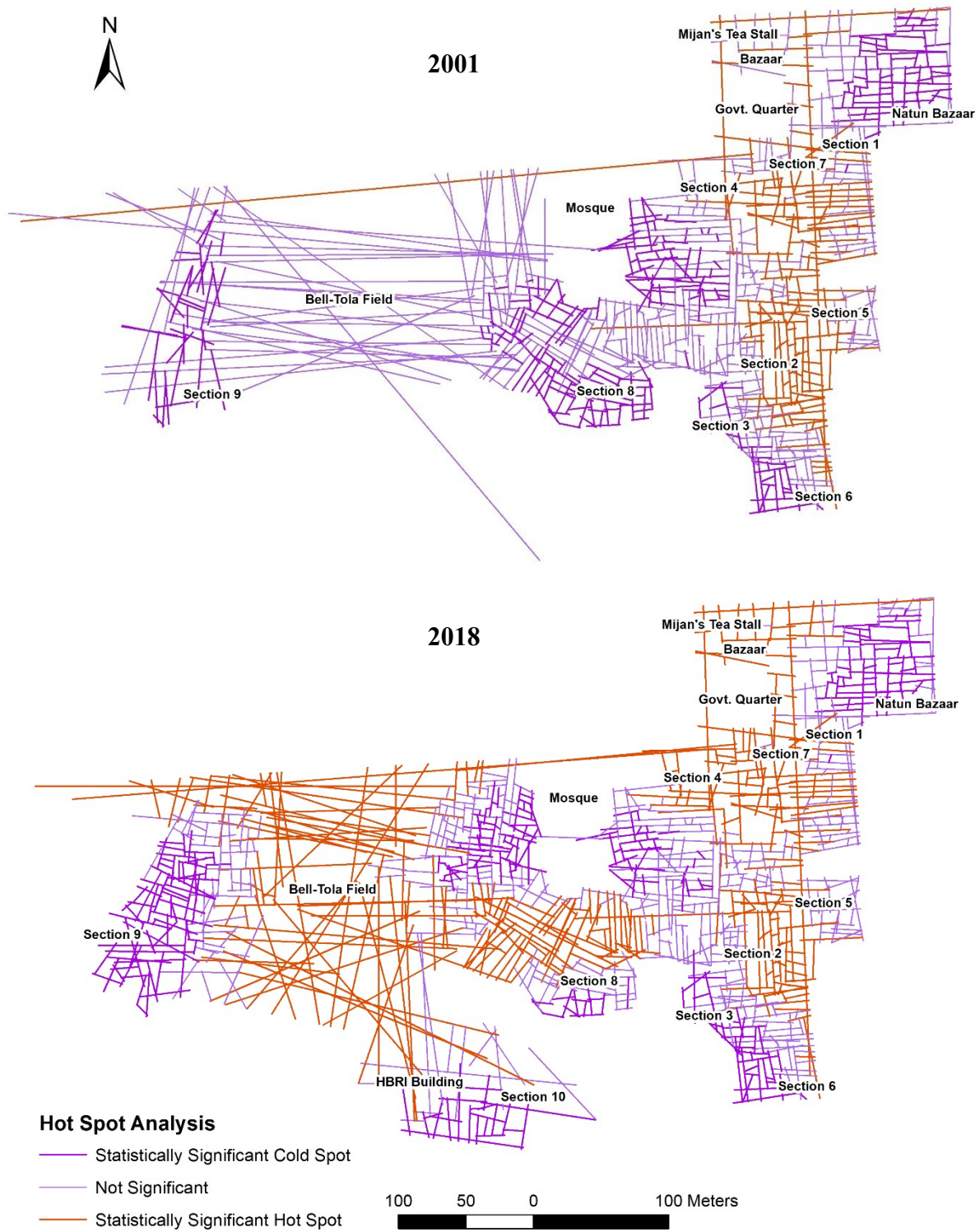


5.2.2 Spatial cluster of integration

The previous section provides a pressing case to argue that the commoning (and also enclosure) activities have changed the spatial configuration of Kalyanpur slum. However, given our interest in the spatialities of these activities, we need to know where this change has taken place. If Kalyanpur slum has evolved more as an organized space over the time then we need to know the whereabouts of this evolution. This inquiry not only helps to identify the emergence of key strategic sites that hold the slum together but also enable us to notice the sheer heterogeneity of spaces within the identified physical boundary of the slum. The summary statistics provided in Table 5.1 indicate the overall change in the spatial configuration of the slum over the last 17 years, but it doesn't indicate the direction of this change, i.e., where this change has largely been taken place. To address this question of 'where', a hotspot analysis of the global integration value of the 2001 and 2018 axial map has been performed using ArcGIS Desktop.

Figure 5.7 shows the result of the hotspot analysis where the statistically significant spatial clusters of higher integration values (hotspots) have been presented in brown and the statistically significant spatial clusters of low integration values (coldspots) have been presented in dark purple. This figure provides significant insights regarding the direction to which the spatial configuration (global integration) has changed. We can see that the slum's spatial integration in 2001 was entirely configured based on the two major arteries crossed by the two sides of the Bazaar, through to the sections 1, 2, 4, and 7. However, this pattern has changed in 2018 with the development and expansion of section 8 where most of the integrated spaces of the slum are being clustered now. The spaces in and around the Bell-Tola field (The open space between sections 9, 10 and 8) have also become more connected and integrated with the entire system. However, we see a large portion of section 9 and the entire section 10 have clusters of coldspots where integration value is significantly low indicating the isolation of these spaces from the overall spatial system.

Figure 5.7: Hotspot Analysis of Global Integration values for 2001 and 2018 axial map



5.2.3 Commoning involves changing in the internal spatial configuration

The two findings presented above suggests that the spatial configuration of commons can reveal the way in which the commoning practices of the slum dwellers are manifested spatially. In the previous chapter, I have argued that the daily activities of the slum dwellers are in fact commoning practices that make and remake the space of Kalyanpur slum. It is through these commoning activities that the space, which used to be a single spatial unit or a vacant piece of land has been transformed into a dynamic space that we have come to know as Kalyanpur slum. However, we didn't know how this transformation has taken place spatially. We didn't know what spatial property is affected by these commoning practices. What we only knew as far as the spatialities of Kalyanpur slum is concerned is its physical boundary. We knew from where the slum begins and where it ends. We knew from where to consider if someone or something is included in or excluded from the slum. All the key five aspects of commons we discussed in previous chapters are in reference to this physical boundary.

The analysis presented above sheds more light on the spatialities of the commons. It shows that the physical boundary is not enough when it comes to investigating the spatialities of a dynamic urban commons such as a slum. What is going on inside the commons is equally important and the study of spatial configuration can enrich our understanding of how territorialities are expressed spatially. While commoning the slum, the commoners build new structures/homes, establish new access, modify and shift the internal boundaries of 'mine', 'ours', and 'others'. The way in which these practices are manifested spatially is by changing the spatial configuration. Same is true for enclosure activities as well. HBRI has also developed staff quarters, a multi-storey building, along with demolishing some parts of the slum during various eviction drives. The fire incidents have burnt various parts of the slum on several occasions. These enclosure activities also have some spatial footprints and consequently have impacted the spatial configuration of the slum. This change is a continuous process and should not be thought of as a one-off event. This dynamic is the result of the combined effect of commoning and enclosures, and could be better or worse for the commoners. What I am trying to get at here, however, is this relationship between commoning and the spatial configuration of the commons. In the context of urban commons such as the slum, which is highly contested among various groups, the internal spatial dynamics is crucially

important in challenging hegemony. The analysis presented above suggests that the study of spatial configuration can help in that process.

5.3 Correspondence between commoning and spatial configuration

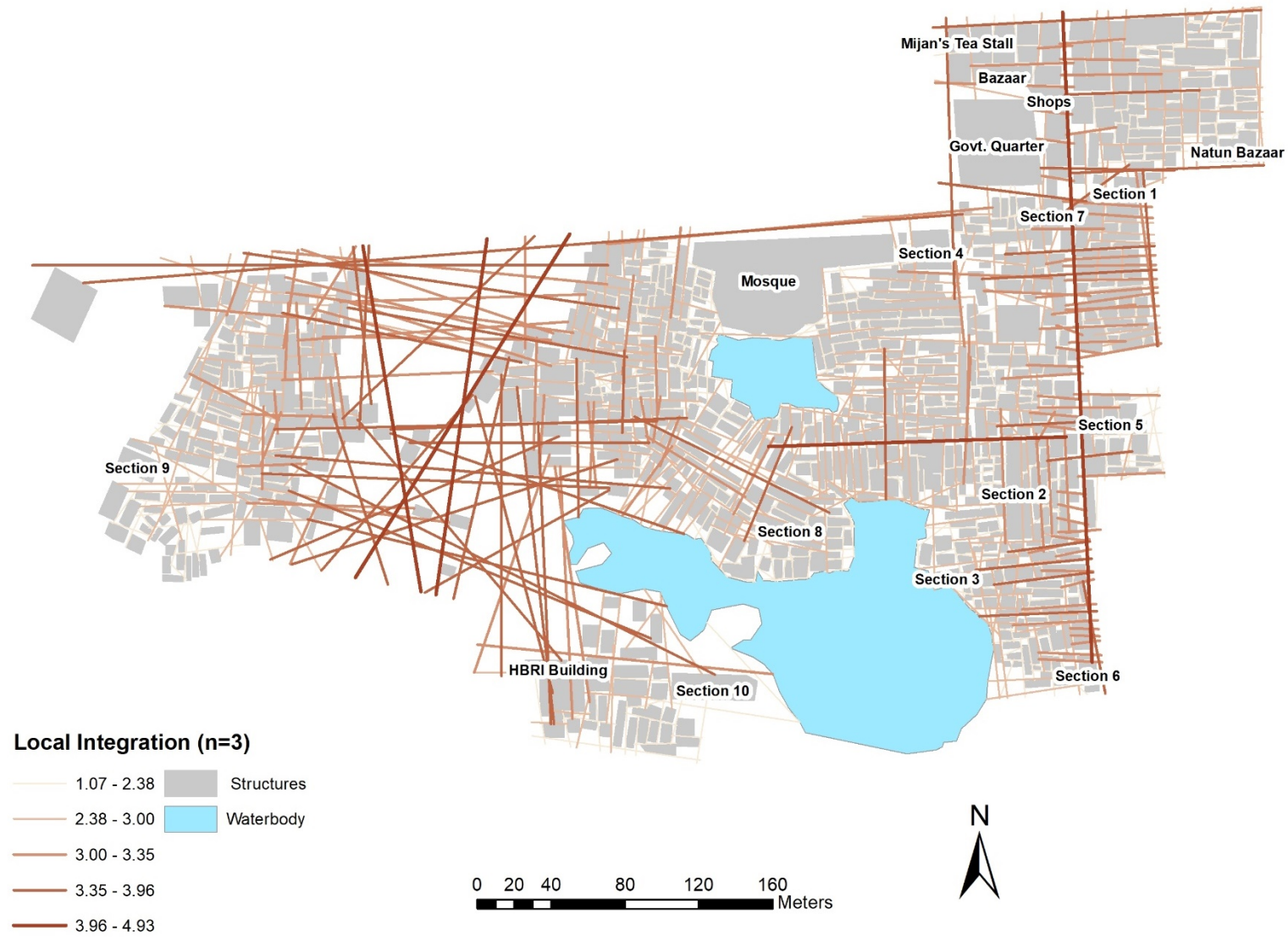
An important inquiry that we undertake in this section is to see the extent to which the ongoing commoning activities of the slum dwellers correspond with the spatial configuration of the common. As we discussed earlier, the spatial configuration plays a vital role in people's ability to encounter others and therefore can consequently impact the capacity of commoning. Results from the previous section indicate that the slum has emerged as an overall organized space over the last 17 years. Can we then directly link the level of commoning practices with the degree to which the slum has evolved into an organized space? This exploration is vital if we want to know if the commoning practices are evenly distributed across the slum or some spaces offers more opportunity for commoning than the others. As we are interested in knowing the kind of spaces that support commoning, the correspondence between commoning and spatial configuration is vital to explore.

I have explored this correspondence by examining the current spatial configuration of the slum and the actual level of dynamism and activities experienced at those very spaces. In order to that, I have used the axial map of the slum to identify various degree of integrated spaces within the slum. With various degree of integrated space identified, I compared the GPS tracked data of the respondents to explore the correspondence between commoning and spatial configuration. Following this comparison, I have provided a detailed description of various spaces from my field observation to understand the characteristics of those spaces.

I would like to begin with this observation that the slum is divided into ten sections where people reside not in tight community clusters but to some extent based on regional origin and kinship. We have seen this tendency in the case of Hashi and Abdul discussed in the previous chapter, who prefers to be in close contact with their neighbours who have similar migration patterns. This clustering results in a socio-spatial mosaic in which people are very much identified in terms of where they belong. Though venturing outside of the designated sections is quite normal as Kholil, Saiful and Shorna have indicated that they are largely benefited in their daily lives by being at

various places in the slum. However reciprocal support and solidarity are often tightened within the sections as contacts outside them are often accompanied by stress and mistrust. Therefore, the spatial configuration of Kalyanpur slum is mainly the product of diverse factors including various degree of community clusters and their housing orientations, the use of available public spaces, and movements through various spaces in order to access the internal and external parts of the slum. Figure 5.8 shows the axial map of Kalyanpur slum. The axial lines on the map represent the local integration values, where the thickness of these lines decreases from the most integrated places to the least integrated places in the system.

Figure 5.8: Local Integration of the Axial Lines in Kallyanpur Slum



5.3.1 Correlation between integration values and GPS tracked locational data

The identification of most integrated parts and least integrated parts of the slum, as shown in Figure 5.8, has been done based on space-space topology. However, how much this varying degree of integration actually corresponds with the level of commoning practices is unknown. Therefore, I correlate the actual level of activities performed by the commoners with the identified integration values using GPS tracked data. The GPS tracked data captured a wide variety of locations (e.g., inside home, out of home, out of slum) where the respondents went within a given day. It also captured the movement routes and the time spent in each location. For this particular analysis, their home-based activity points and out of slum activity points were omitted in order to focus on patterns of stays and of movement through various open spaces within the slum. Only those out-of-home locations where a respondent spent more than 15 minutes (staying locations) and/or passed through (flows) were considered. Consideration was also made based on gender. The number of activity points along each axial line has been counted and the correlation analysis has been performed to see if the number of stays and flows are correlated with the level of integration. The correlation between men's and women's total number of stays and flows was also calculated to identify whether they co-present in public spaces or navigate along the same paths.

Figure 5.9 shows the location of stays along the axial lines for men and women in different colours. What we can see from this map is that some points are close to highly-integrated axial lines and some are not. There are also points where men and women spatially co-present but also variations in terms of their spatial distribution. This variation is noticeable for instance at the south of section four, and along the line at the south of section seven for men and women respectively. Distribution has been shaped by the presence of numerous tea stalls, political party offices, and labour intensive businesses such as furniture making and metal processing at section four (compared to other parts). Similarly, a handful of NGO programmes (CBO offices) are clustered at section 7 which has also shaped the staying location of the women. Similar patterns have also emerged in Figure 5.10 which shows the same gender differences in terms of movement along the routes through section 7 and 4 due to the same reasons.

Figure 5.9: Stay locations of the respondents along the Axial Lines

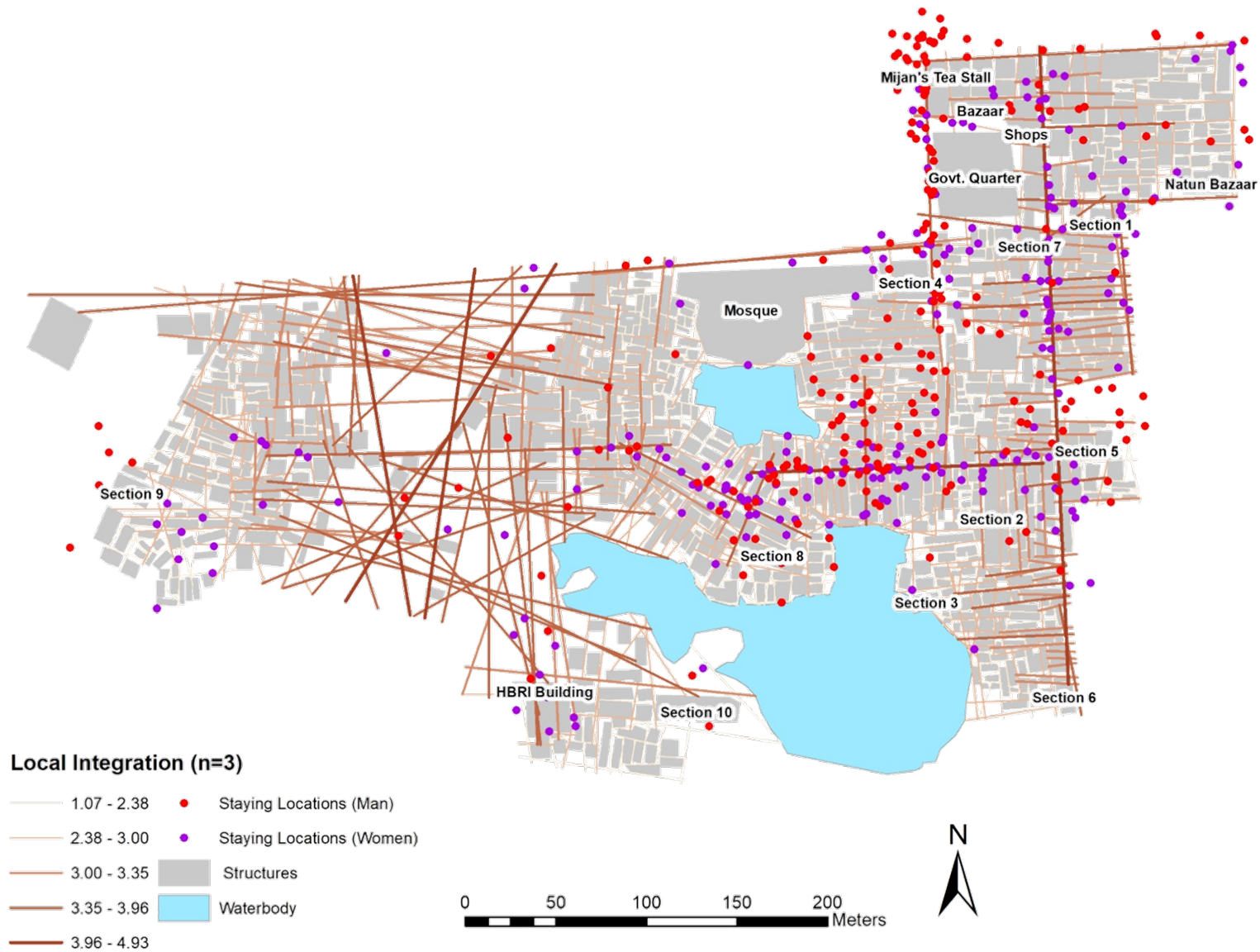


Figure 5.10: Women's movement along the Axial Lines

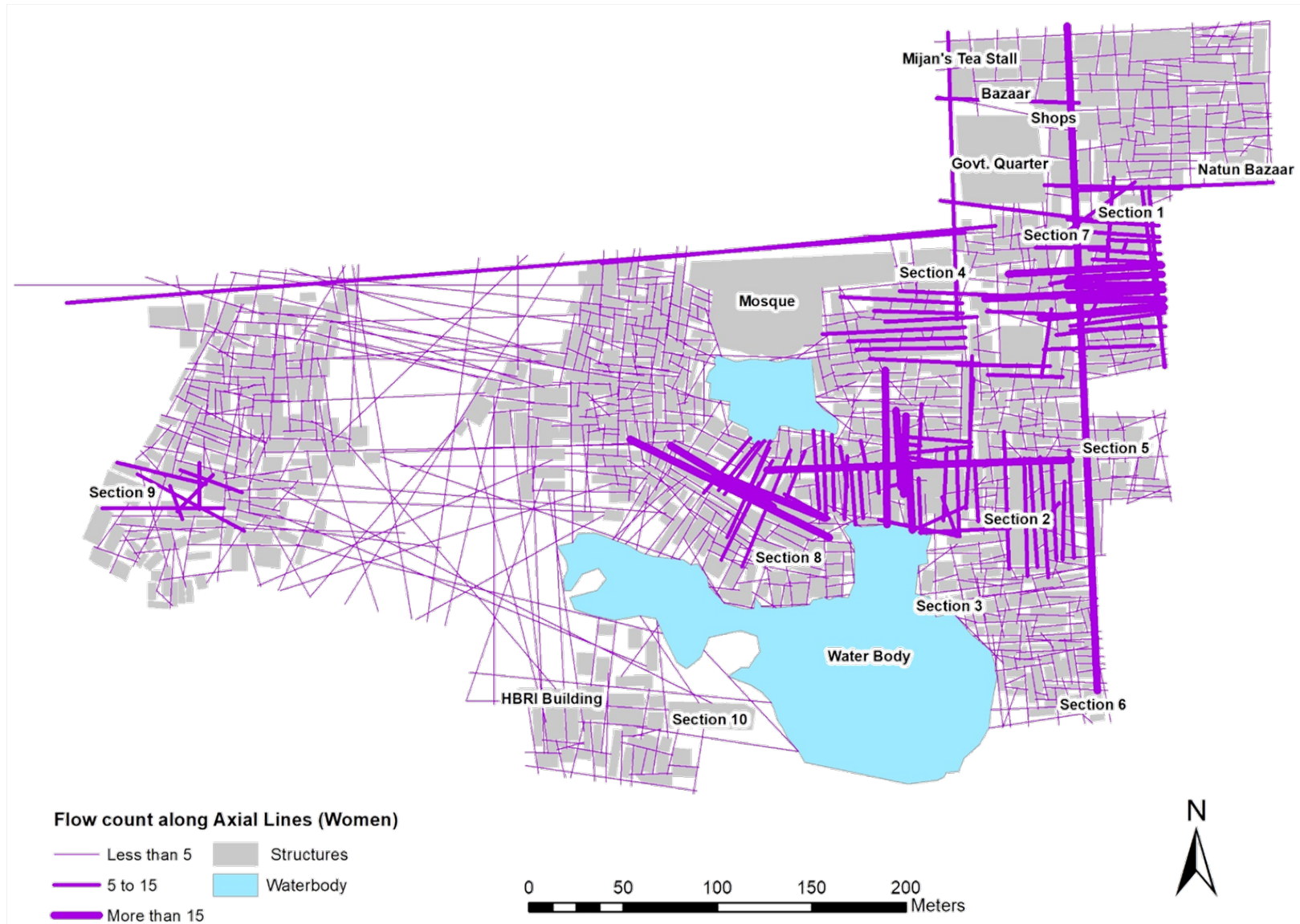


Figure 5.11: Men's movement along the Axial Lines

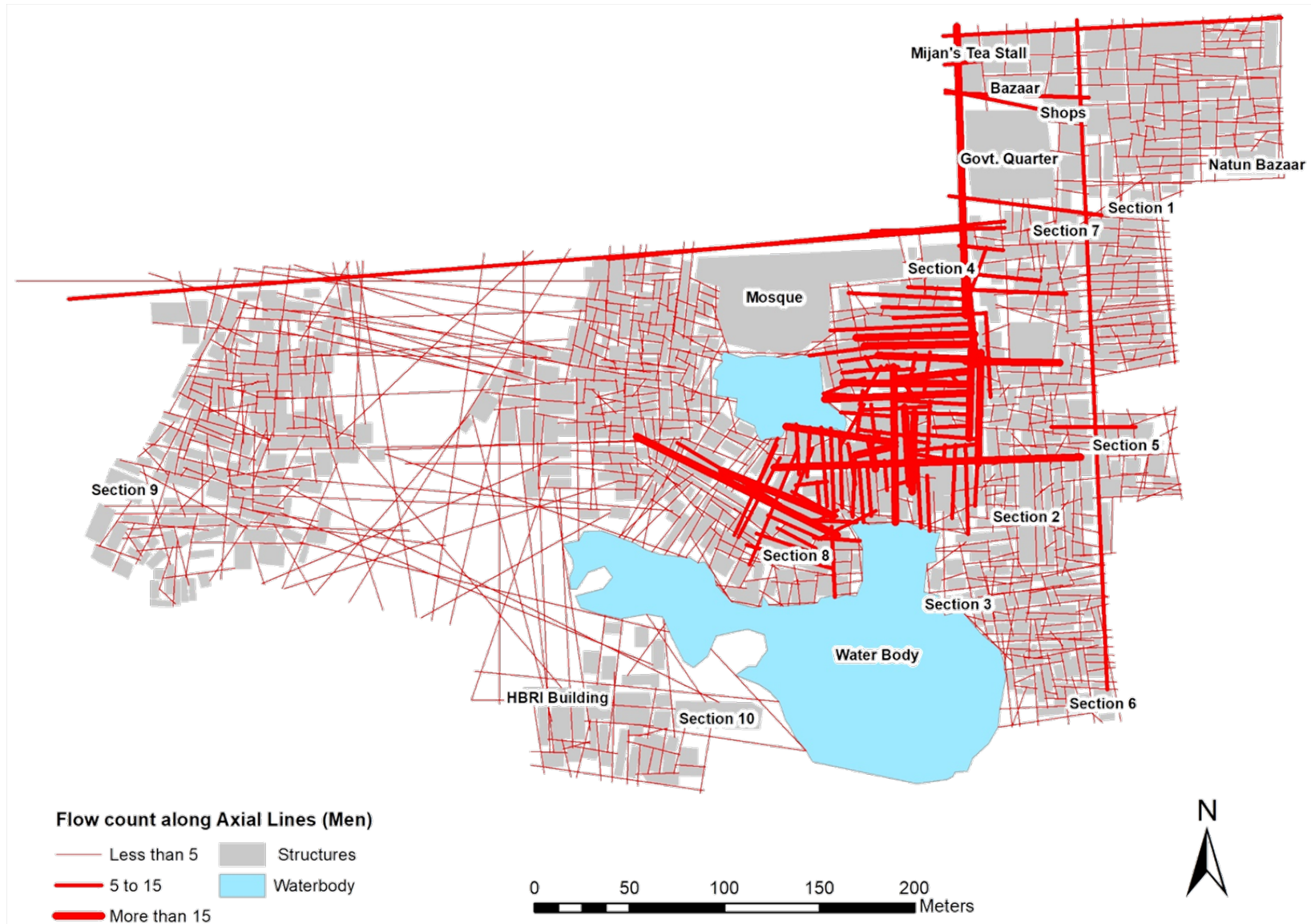


Table 5.2: Correlation of integration values and GPS data

Pearson correlation coefficient (r)	Men	Women
Local integration (staying at open spaces)	0.114	0.235
Local integration (movement through open spaces)	0.352	0.208
Men	X	0.205
Women	0.205	X

Correlation is significant at 0.01 (two-tailed).

N=945 son correlation coefficient

The map provides us with a visual representation of the locations along the axial lines, but to be sure if stay locations are correlated with integration level, statistical analysis is needed. I have calculated the Pearson correlation coefficient (r) between the number of points close to or lying on each axial line and the respective integration value of that line. The results presented in Table 5.2 show a positive correlation between these two values for both men and women. In order to determine whether these results are statistically significant, a two-tailed test of significance has been performed with N=945 (total number of axial lines) and a confidence level of .01. The result of the test indicates that the level of correlation is significant (sig value close to 0).

Figure 5.10 and Figure 5.11 show the number of times a particular path was used for navigation by women and men respondents. These two maps suggest some similarities and differences in the navigation through these spaces by women and man as discussed earlier. The Pearson correlation coefficient (r) was calculated to see whether the greatest flow occurs along the most highly integrated spaces and whether there is any gender difference in terms of the spatial choice of these routes. The results from Table 5.2 suggest a statistically significant correlation between integration value and the number of flows. These imply that higher numbers of both presence and movements occur through the most integrated spaces in the system. The activities of both men and women, whether staying at a space or passing through it, are significantly related to the integration of that space. In terms of co-presence at a space by men and women, there is no significant difference as a high number of men at a place is accompanied by the presence of a high number of women, and vice versa.

It should be noted here that although the correlations are positive and significant, they are not very strong. This is mainly due to the nature of the comparison in this case. For instance, the integration scores are calculated based on the geometric properties of the network and no other socio-economic variables have been considered in their calculation. Therefore, when correlation analysis is performed between the integration scores and the actual level of activities (which is a result of multiple socio-economic aspects of the respondents), a weak correlation value is normal. Also, a comparatively small sample size (31 respondents and their corresponding locations) has influenced the resulting weak correlation value.

5.3.2 A Spatial narrative of various integrated spaces in the slum

The analysis presented above indicates that there is statistically significant correspondence between the spatial configuration of the commons and actual level of commoning activities. Highly integrated spaces are also the spaces where most of the out-of-home activities take place. In order to understand those spaces in deeper, I provide a spatial narrative of those various integrated spaces and corresponding types of activities based on my field observation. This exploration would help us in understanding the meaning of those integration values on the real ground.

Among the most integrated spaces are the two arteries at the north that cut through the slum entrance near Mijan's tea stall, the Bazaar, and shops, providing access to traffic such as trucks, mini-trucks, pickups, and vans for loading and unloading goods as well as pedestrian access to the main road (Figure 5.8). These two arteries form the backbone of the slum and represent its most vibrant areas. They are lined with numerous retail stores, restaurants, grocery shops, recycling stores, and so on (Image 5.1). They are 8 to 10 metres wide on average where they meet with the Natun Bazaar road but gradually decrease to 5 to 6 metres on average further south. These streets are usually crowded with many different activities taking place simultaneously involving both people from the slum and many from outside it. This is where the difference between the inner-slum and outer-slum get blurred. Standing anywhere along this path, it is hard to get a sense of the inner spatial organisation of common, because the rules of inclusion and exclusion are flexible here. This flexibility allows for various retail activities to be held involving others at these spaces.

Sitting at Mijan's tea stall located on a space like this, I noticed the way fish vendors were selling their fishes (described at the beginning of the previous chapter). This is where my

respondent Saiful spends most of his time by interacting with others, many of them from outside of the sum. Jorina's restaurant is located just in the middle of this main street where Saiful is usually found if he doesn't have any other work to do. Like Jorina's restaurant, there are a series of restaurants operating at this place from as early as 7:00 am to up until 11:00 pm. Being reputed for cheap and tasty meals, these restaurants are full of customers all around the day and night, and are especially popular among the Rickshaw pullers, day labours, and street vendors. Many tea stalls are located at this place including Mijan's who helped Rojina to find a place to stay in the slum in order to find her husband. The Bazaar is located just at the entrance of these streets and becomes the main hub of activity during the morning and afternoon time.

Image 5.1: Kallyanpur slum' main arteries



Off these two main streets, things change quickly as the path (the thick axial lines crossing between the two water bodies in Figure 5.8) descending from them leads to the slum's core

areas. This narrows to 3 metres (even less in some sections) and does not allow traffic other than pedestrian and bicycle/motorbike. What is noticeable at this path is a feeling of the intimacy of the environment, with the noise level significantly reduced. People from outside of the slum could hardly be found here. The space along this path is used equally for domestic and income-generating activities. Borna's tea stall is situated along this path from where she also keeps her eye on the toilet complex shared among the families. There are numbers of home-based entrepreneurs, grocery shops, pharmacies, and CD-DVD stores, creating a dynamic space in every possible way. Rojina's grocery store, the firewood storage of Shorna's husband Razzak, or the childcare centre maintained by Nilufer are all located on spaces like this. Water collection points lie along this path where people take showers or queue to collect water. It is common to find groups of women talking, laughing, or arguing in front of their respective houses while cooking on their clay stoves or near the water collection points. On the doorsteps, women may also be found oiling, combing, and styling other women's hair into buns. It is also common to see elderly people sleeping or just resting on a bench at the corner of a grocery shop. Here public space mingles with private space in a way that makes it difficult to distinguish between 'mine' and 'ours'. The public and private are so mixed to each other that it is hard standing on these paths to perceive what is accessible and what is not. These paths are used as a commons where the private use of these spaces such as for domestic purposes are equality shared with public functions such as retail activities, recreational activities, and so on. Most of the community and group meetings are held at various houses located at places like this and the only community centre is also located on this path. During the monsoon period, these paths get flooded and become extremely muddy. Walking these paths immediately after a brief shower or rain, one must tread extremely carefully to avoid colliding with other pedestrians or moving objects.

What follows from this inner artery is groups of small, subdivided paths with low integration values connecting individual houses (Image 5.2). The paths are mostly in shade, and where house roofs overlap the sky is hardly visible. Fumes from clay stoves fill the gaps between houses. Dwellers are busy with their respective household activities. Both men and women are found at these spaces engaged in preparing food, sweeping, drying cloths, feeding the chickens, and so on. Children are seen to be playing in groups. This is the very core of the slum and things are highly organised. Social control is immediately apparent. Behaviours seem routinized and codified, and outsiders are easy to identify.

Image 5.2: Spaces of low integration value



It is at spaces like these where most of the low integrated axial lines are clustered. These spaces are characterised by private uses of the spaces. However, this is not to mean that these spaces of low integration are not engaged in commoning activities. As discussed, in the previous chapter that most of the houses in Kalyanpur slum have functions that are more than just for residential purpose. For instance, Nazia's house is located at a place like this, however, she runs tailoring business from her house. Her customers are mostly from within the slum but it is quite common to have customers from outside. But it is true that places like these are so deep inside the slum that it is difficult to find the way around for outsiders and it is quite easy to be lost.

5.3.3 Characteristics of highly integrated spaces

From the description of the inner spaces of Kalyanpur slum discussed above, we can notice some interesting characteristics of highly integrated spaces. For instance, compared to men, women's presence in the highly integrated spaces has been observed. The value of the Pearson correlation coefficient (r) derived for women compared to men is higher when it comes to staying at highly integrated spaces. This is quite understandable given the higher amount of retail activities performed by women compared to men. Most retail services within the slum are operated by women, and given that these retail activities are located in the most integrated spaces, the result is to be expected. On the other hand, in terms of navigation (flow), the Pearson correlation coefficient (r) value for men is higher than for women. This is also not surprising because it is men who predominantly perform out-of-slum activities, with most men finding work in the nearby Mirpur Bazaar, Gabtoli Bus Stand, or Kalyanpur Market areas. These areas being located close to the slum, are travelled several times a day by men to find to work and to also search for potential work.

Spaces of high integration have also found to be the spaces where the income-earning and non-income earning activities are mingled closely with each other. These activities are performed in close vicinity as one is vital for the functioning of the other. For instance, Rojina's grocery store is also the source of recreational activities for many others, such as Saiful and Kholil. Rojina keeps a television on all day in her store to attract more customers, with Bengali- and Hindi-language movies at the top of her playlist. Saiful and Shabuj love watching movies/dramas at the end of their hard-working day and enjoy spending at least a couple of hours in this store in the evening. Though many other stores also have a television, it is Rojina's that Saiful and Shabuj like the most. They prefer it because of their closer relationship and better understanding with Rojina and her husband than with other store operators. This is also true for Mijan's tea stall located right at the beginning of the axial line with high integration value. Mijan's stall is an important source of news regarding potential work opportunities as many contractors and middlemen gather there early every morning and after sunset. Most of my male respondents identified having used this place not just for drinking but also for searching for work or networking.

Another characteristic of the highly integrated spaces is that these spaces have temporal variation in terms of how they are used. This variation suggests the use of a given space by the same or different users at different times of the day, for the same or different purposes. The

rental spaces located on highly integrated axial lines through the slum in this regard can be a useful example. There are various rental spaces that are often shared by several individuals, either by compartmentalising the workspace or by subdividing the work hours among them. For instance, Hashi rented a five-by-five-metre space for a tea stall in section 8 of the slum, which she and her husband thought was too large and costly for them. But as no other rental options were available at that attractive location, Hashi eventually decided to rent that place. However, after few weeks, Hashi realised that the rental cost was higher than the income generated by her tea stall. Since most tea stall trading takes place in the afternoon, she agreed to split their hours of operation to accommodate Rumana (39, female), who was seeking a space for her cloth store. Together they talked with the owner of the space, who had no objection and appreciated the little extra income. This was a win-win situation for all three parties sharing the same space for their respective businesses. Arrangements like this are quite common characteristics of the most integrated spaces in the slum. Such arrangement often enables the slum dwellers to work at multiple jobs at multiple sites.

5.4 Identification of the contested spaces

Exploring the correspondence between the integration scores and corresponding level of activities along the axial lines also help us to identify the space of contestation. Especially, the presence of highly integrated spaces for which the corresponding low amount of uses have been registered provides some interesting insights regarding the contestation over the space. A close look at Figure 5.9 indicates such inconsistency at the Bell-Tola open field situated between sections 8 and 9. On the southern side of this open field are the HBRI quarters (gated community) and a multi-storey building standing in front of section 10. The integration values of the axial lines crossing Bell-Tola field are comparatively high. The axial lines crossing this site represent the longest visible and physically accessible lines between two points. Multiple axial lines crossing the Bell-Tola field would effectively mean that the field is associated with an increased field of views from multiple directions. A high integration score for these axial lines would also mean that Bell-Tola field is closely situated in the space-space network of the whole slum system and is comparatively easy to access from other parts of the slum. Therefore the Space Syntax model for the slum indicates that Bell-Tola field offers a large number of potential activities/interactions of be taken place¹¹. We have seen earlier that such modelled

¹¹ My personal experience of Bell-Tola field affirms this findings. This site is clearly holding the three parts of the slum (Burnt slum: section 1-8, Section 9 and Section 10) together. As per some dwellers, new business and shops are likely to open at this place in the future if the tension between the slum dwellers and HBRI settles down.

integration score corresponds with actual level of activities taken place at those spaces (e.g. Staying and navigating frequency). However, from the axial map presented in Figure 5.9, we can see a mismatch between the number of stays and integration value for Bell-Tola open field. This is also true for movement, where Figure 5.10 and Figure 5.11 showing that both women and men have lower numbers of movement through Bell-Tola field compared to other spaces of higher integration values.

To understand the role of Bell-Tola field in the overall correlation analysis I again performed statistical analysis. I excluded the axial lines crossing through Bell-Tola field from the analysis and calculated the Pearson correlation coefficient (r) presented in Table 5.3. The result suggests an increased correlation between the number of stays and integration value and also the number of movements and integration value. This means that the exclusion of this part of the system increases the positive correlation between those variables. Therefore, unlike the system's other integrated spaces, for this open field, despite being a highly integrated space, the number of activities is lower. Excluding this part of the slum, the rest of the areas possess a higher correlation between integration and activities. The coefficient value between staying locations and integration values jumps from 0.114 to 0.148 for men and from 0.235 to 0.297 for women. The coefficient value also increases for both men and women in the case of movement through integrated spaces (0.352 to 0.434 and 0.208 to 0.271, respectively). The coefficient for men and women's co-presence at spaces also increases significantly once Bell-Tola field is excluded from the analysis.

Table 5.3: Correlation analysis excluding the contested open space

R (excluding contested space)	Men	Women
Local integration (staying at open space)	0.148	0.297
Local integration (movement through open space)	0.434	0.271
Men	X	0.524
Women	0.524	X

Correlation is significant at 0.01 (two-tailed).

N=854

In line with these statistical findings, my personal observations of this space and also the interviews suggest a lower number of activities taking place at this particular space. Though this open field has similar integration values and thus offer a high potential for dynamic activities like the other highly integrated parts of Kalyanpur slum, there seems to be a tendency of careful avoidance of this particular space among the people of Kalyanpur slum. I myself observed very limited use of this space despite good connectivity of this space with three different parts of Kalyanpur slum (sections 8, 9, and 10). There is a deep feeling of emptiness associated with this place when one visits at any time. This space, however, is used by teenagers only in the afternoon to play cricket (Image 5.4, left).

This lack of activity has to a large extent to do with the existing tension between the slum dwellers and HBRI around the Bell-Tola open field. Though there is tension and contestation through the entire slum, in recent years, there have been continuous efforts to gain control over this piece of land by different groups, especially by some slumlords and HBRI. As discussed earlier that there has been a tremendous change in land cover at this part of slum over the last decade, especially by the expansion of section 8. The hotspot analysis also suggested that the cluster of integrated areas has shifted towards this direction over the time. These expansions which in spatial term could think of as changing spatial configuration have prompted HBRI to take initiatives from their side. In response to these expansions, HBRI did not limit itself to eviction drives but also built more permanent structures rapidly around the area (Image 5.3). The construction of a new multi-storey HBRI building (Image 5.4, right) – which looks very odd considering the surrounding landscape – along with several quarters for HBRI employees are, according to many slum dwellers, a countermeasure against slum expansion. These quarters are well maintained in contrast with the nearby slum settlements, with several gates and fences used to spatially separate the quarters from the slum (Image 5.3). Bell-Tola field also provides quick access for pedestrians to the nearby Darus-Salam and Kalyanpur Bus Stand area; however, the movement of the slum dwellers through these spaces is highly regulated and controlled. Walking the road that crosses this space also indicates that there are more construction works to come in the near future as many construction materials are already stored on both sides of the road near these quarters (Image 5.3, right).

Image 5.3: Inside the HBRI Quarter near Bell-Tola field



Image 5.4: (Left to right) Teenagers playing cricket at Bell-Tola open field; preparation of newly constructed rental space near the field; the lone standing HBRI building



In recent times, police patrolling in this area and their harassment of the slum people have increased significantly. Interviews revealed that incidents of police picking up slum dwellers from this field have risen over the last few years. Many of those taken into custody were accused of carrying and trafficking drugs. However, most respondents believed that the frequent police raid at the Bell-Tola open field is part of a bigger game against the interests of the slum. The intention is to create a sense of fear and tension among slum dwellers. Jorina, the 30-year-old restaurant owner complained that her son was taken by police from Bell-Tola field two years ago. She denied the accusation of any crime that may have been committed by her 16-year-old son:

My son was playing in the field with his friends like any other day when he was picked up by the police. He was framed by the police, who put weed in his pocket and accused him of drug trafficking. Later I had to pay around 30,000 BDT (375 USD) to free him. I had to borrow money from my neighbours.

A similar situation was experienced just a few months back by Fokrul, a 45-year-old day labourer who lives in section 10 of the slum behind the multi-storied HBRI building. Fokrul said:

It was around 6:30 in the evening, when I was returning home with my younger son, Shohag (9), with me. While crossing Bell-Tola field, I was stopped by a police patrol team who told me that they wanted to search my pockets. While a police officer was attempting to search, I noticed a small packet tucked between his fingers and I grabbed his hand right away. I asked him why he wants to frame me with this packet that doesn't belong to me. My son cried out as the situation was making him nervous. The police were looking at each other, and eventually, they let me go. One then slapped me in the face, saying that because of my son, they are letting me go this time.

Contestation over the Bell-Tola open field and consequent incidents here resulted in a tendency among regular slum dwellers to avoid the place. For many, these contestations and the limited access have prompted them to take longer routes for their daily commuting. Some respondents mentioned that they now are more restrictive about their children playing on that ground. Others were critical of the slum lords/local leaders, asserting that it is the greed of a few influential people that have created some of these tense situations over this space. Abdul (56, male) said:

They built houses saying that it is for the interests of the people of the slum, but actually, they use our names for their personal gain. It is them who most benefit from those new houses, but it is mostly us who pay price for their actions.

In general, the slum dwellers associate this contested space with fear and tension. They feel powerless in the face of the ongoing construction and development work rapidly being carried out around that area by HBRI. They feel as though it is another way for the government to take over the entire slum area, supported by the actions of police and various groups with vested interests. Therefore, the slum dwellers seize opportunities to exercise their power over this space when a situation arises. For example, during the fire incidents in January 2016, they chose the Bell-Tola open field to demonstrate against the local MP, whom they strongly believe to be an ally of HBRI and the mastermind behind the fire incident. The MP, HBRI, slum lords/local leaders, and slum dwellers are thus in continuous negotiation in various ways regarding their respective claims on this place.

5.5 Points to note from the spatialities of commons

The analysis presented above enhances our understanding of how the spatialities of commons are manifested through the internal spatial configuration of the commons. There are three specific insights gained from the spatialities of Kalyanpur slum. First is that the commoning practices are manifested spatially not necessarily by the means of a fixed physical boundary but internally in the way the spaces are organised. The spatial configuration of the slum corresponds to a great extent with various commoning activities of the slum dwellers. The analysis of changing spatial configuration over time suggests that commoning and also enclosure activities impact the internal spatial organisation of the commons. We have seen that the expansion and growth of the slum caused by various activities that I call commoning, have changed the spatial configuration of the slum. We have also seen at the same time that the enclosure activities of HBRI also have materialised in terms of altered spatial configuration. This is because commoning and also enclosure involve re-appropriating spaces, redrawing the boundaries, redefining access, use, and controls which in effect change the spatial properties of the commons. It is interesting that this may not be the case for all types of commons. For instance, Huron's (2018) theorisation of a housing cooperative in Washington DC as an urban common or the Women's library located at Newtown suburb of Sydney theorised as a commons by Williams (2018), does not necessarily have anything to do with changing the spatial configuration. In these cases, commoning practices have been performed by changing no-spatial aspects of the commons such as access (i.e., membership), use, benefit, care, and responsibility but the spatial properties of the common remained almost unchanged (though some renovation and reorganisation of the space have been taken place). In some other cases such as the squatting movements in Berlin and New York as theorised by Katz and Mayer (1985) or in the case of post-earthquake Christchurch as discussed by Dombroski, Diprose, and Boles (2019) we get hints about changing the spatial configuration by various groups of commoners. Therefore, my argument that the spatial manifestation of commoning is reflected through changing spatial configuration of the commons may not be suitable for other cases of urban commons, but it certainly fits the context of urban informal settlements. This is to remind here that urban commons are as diverse as the urban itself and the characteristics of urban commons may differ significantly by case to case.

Secondly, we come to know from the analysis presented above is that commoning activities are not uniformly practised across the commons. Unlike Common Pool Resources (CPR) as

theorised by institutionalist scholars, a commons like the informal settlement exhibits various degrees of commoning, depending on the spatial configuration of the common. Unlike a bounded grazing land, a water resource or a forest where it is either being commoned as a whole or into the process of being commoned as a whole or enclosed as a whole, informal settlements may have various degrees of commoning experienced in various parts of it. Comparing the GPS tracked data of the respondents with the spatial configuration of Kalyanpur slum suggests that commoning is more visible and practised at places of higher integration. The level of intensity in terms of use of space varies according to the structure of the space to a great extent. With such correspondence between commoning and spatial configuration, we have revealed the heterogeneous character of the most integrated spaces in the slum. Commoning in the slum is characterised by strategically using the most integrated parts of the slum for multiple purposes and often in parallel to each other. The commoning practices at those most integrated spaces in the slum have both spatial and temporal variation.

The third insight we gain from the analysis above is the identification of internal boundaries of opportunity and struggle. We have also seen how some integrated spaces do not function like other integrated places and rather exhibit contradictions and conflicts among different groups. We have identified the contestation over the Bell-Tola field by linking the spatial configuration and corresponding commoning practices. Therefore, the study of the spatial configuration of the slum can help us understand the internal dynamics of the space. It is important to note here that the ongoing contestation can further change the spatial configuration and therefore impact the commoning practices of the slum dwellers. This intertwined relation between commoning and spatial configuration is not static, rather it is ongoing and continuously impacting both. Such a finding is more in line with the argument about urban commons put forward by most of the scholars that urban commons is marked with contradictions, conflicts, and always in the process of 'becoming'. However, where most of the commons scholars have paid attention to the external boundary of commons as far as spatialities are concerned, with these three insights gained in this chapter, I argue that we need to investigate the inner spatial configuration as well. By studying the spatial configuration and corresponding commoning activities at different places, we can capture the kind of dynamism exhibited in commons like urban informal settlements.

5.6 Conclusion

This chapter sheds light on the spatialities of commons and therefore contributes directly to answering the second part of research question two: The spatial characteristics of the commons. In general, the spatialities of commons have been paid little attention by scholars despite commons being fundamentally socio-spatial. Where the spatiality of commons has been addressed, the focus has either remained on the physical boundary of the common or the space has been treated as just a background of the analysis. Treating commons as an object or resource has hindered this process of diving deeper into the spatialities. However, investigations of urban commons such as the informal settlement remain incomplete without inquiring about its inner spatial dynamism. The problems of informal settlements are inherently connected with the notion of space. The scarcity of land, high population density, eviction drive, contestation over the land, are all fundamentality related to space. Therefore, if informal settlements are conceptualized as urban commons, the inner spatial dimensions of the informal settlements have to be incorporated into this conceptualization. The analysis presented in the previous chapter questioned the linear and simplistic understanding of slums and rather highlighted the heterogeneous socialities of commoning exhibited in Kalyanpur slum. By analysing the daily practices of the slum dwellers around the five key aspects of commons, I argued that these practices are not necessarily the passive and devalued ‘informal’ activities but the agentive act of commoning. It is through these practices of commoning that the slum dwellers continuously make and remake the space of Kalyanpur slum as a commons. In this chapter, I take my argument further by investigating the ways in which those commoning activities are manifested spatially. I have done that by exploring the relationship between commoning and the spatial configuration of the common.

In order to explore the relationship between commoning and the spatial configuration of the common, I have adopted the techniques proposed by Space-syntax in which space is not conceptualized as the container of human activity, but rather as an agent that can shape and be shaped by the human activities. It is quite impossible to think of commoning practices without some sort of movements, interactions, encounters, and collective actions, which according to the Space-syntax theories is largely interrelated with the way space is configured. Conceptualizing human activities fundamentally linked with the configuration of space has enabled me to converge my analysis of commoning with the spatial configuration of the common. Moreover, the Space-syntax approach offers some concrete tools and techniques to

analyse the spatial configuration which I have discussed in this chapter. Using these tools, the spatial configuration of Kalyanpur slum has been analysed and consequently the relation between commoning and the spatial properties of the common have been explored.

This exploration has enhanced our understanding of Kalyanpur slum as a commons. There are three major findings that have come up from this exploration. One is that in the context of urban informal settlements, commoning and enclosure practices leave their marks as spatial footprints and consequently change the spatial configuration of the commons. I have argued that while the migrant community was commoning the slum by widening the access, sharing the use, broadening the benefits and taking care and responsibility of their common, they were also changing the spatial configuration of the common. Their commoning practices have transformed a piece of vacant land into a dynamic space of living while these commoning practices have also changed the spatial configuration from being a single homogenous unit of spaces into a collection of spaces interconnected to each other. By comparative analysis of the spatial configuration of the slum between 2001 and 2018, I have shown the extent to which the emergence of the common has changed the spatial configurations. I have added to this the role played by the enclosure activities because it is a combination of commoning and enclosure that shapes the emergence of the common.

Another important finding derived from this exploration is the varying degree of commoning practices in relation to the configuration of the space. From the GPS tracked locational data, I have shown that the highly integrated spaces are also the spaces of high volumes of commoning activities. There is a positive correlation between intensive commoning activities being performed at locations of high integration. I have also explored the unique characteristics of the commoning activities that are performed in highly integrated spaces. These activities are mingled between income-earning and non-income earning so tightly that it is quite difficult to get a sense of them separately. Highly integrated areas are therefore likely to accommodate and combine multipurpose commoning practices such as voluntary work, care work, reciprocal support, wage-earning activities, recreational activities, and so on.

Thirdly, the correspondence between commoning and spatial configuration has also allowed us to identify the spaces of contestation. It has been possible by noticing the mismatch between the highly integrated space and the actual low level of activities exhibited in that space. The Bell-Tola open field in the slum is subject to contestation between the slum dwellers and the HBRI. Though there is no physical barrier restricting slum dweller's access to this highly

integrated space, the existing conflicts and tension around that space have largely kept the slum dwellers away from commoning that space. However, the moment they sense an opportunity, they make full use of it by claiming their right to this space like they did after the fire incident in 2016. Therefore, highly integrated space could be marked with a high level of contestation and competition among various groups. Investigating the spatial configuration of the common can enable us to visualize these spaces of contestation.

Kalyanpur slum is an urban common that is made and remade by commoning practices and the consequent reorientation of the spatial configuration. Thinking of informal settlement from such a perspective challenges the mainstream idea about informal settlement. In the next chapter, we shall explore the ways in which the socio-spatialities discussed in the previous chapter and this chapter enriches our conceptualization of informal settlement and our approach to intervening in informal settlements. We shall also explore how the case study of Kalyanpur slum can inform the discussion of urban commons.

Chapter 6 : Reimagining urban informal settlements

6.1 Introduction

The socio-spatiality of Kalyanpur slum discussed in the last two chapters can help us to reimagine urban informal settlements beyond the pervasive notion of poverty, dysfunctional space and informality. As we have now theorised Kalyanpur slum as a commons and explored the heterogeneity of this commons, it is now time for us to discuss how such theorisation can dismantle some of the presumptions about urban informal settlements. In addition to this, the theorisation of Kalyanpur slum can also enrich the discussion and debate around commons in general. This chapter takes up these tasks by answering the last research question:

- How does an understanding of Kalyanpur slum as a commons help us to enrich our existing conceptualization of informal settlements?

This exploration can significantly impact our approach in designing policy interventions for urban informal settlements, because our approaches to intervene in urban informal settlements largely depends on how we conceptualise them. If our understanding of informal settlements is marked by some colonial legacy that prevents us from seeing the on-the-ground complexities then our interventions are unlikely to make any real difference in the lives of the millions living in slums. Despite years of research, policy advocacy, service delivery programmes, and so many other forms of initiatives, slum dwellers continue to suffer (Arabindoo, 2011). In most of the countries of the Global South, the planning and policy frameworks have failed to ensure a dignified and sustainable living environment for slum dwellers. Instead, as mentioned in chapter one, a destructive approach has been taken by various governments around the world which has intensified the misery of slum dwellers. Their contributions in the making of the 'urban' have most often been overlooked.

The purpose of this research has been to bring a commons perspective into the discussion of informal settlements in order to enrich our conceptualisation of informal settlements as well as to contribute to the evolving ideas about commons. By highlighting some of the key learnings from the Kalyanpur case study, in this chapter, I challenge the overly simple and homogeneous narratives about slums. I discuss the ways in which a commons approach to Kalyanpur slum can enrich our existing knowledge and can create new avenues for a better understanding of urban informal settlements. Therefore, I begin this chapter by highlighting the key points we

observed from the socio-spatial analysis of Kalyanpur commons already presented. And then I discuss how these learnings can inform our existing pervasive conceptualisation of informal settlements as ‘collections of poor housing’ and ‘extra-legal settlements’.

6.2 Key observations from Kalyanpur slum

From the socio-spatial analysis presented in the last two chapters, we can highlight six major observations from the study of Kalyanpur slum. Some of these observations are unique to urban informal settlements such as the way in which the spatialities of the commons are expressed. Whereas some observations have been noticed in various other cases of urban commons such as the constitutive process of the commons and the community. However, each of these observations contributes to our evolving understanding of urban commons and are significantly important for us to reimagine urban informal settlements.

6.2.1 Kalyanpur commons is not found, it is created

I came here with my father in 1988 from Bhola District. At first, we knew nothing about this place or Dhaka in general. My father thought we shall have more earning opportunities if we migrate to Dhaka. But when we arrived here, our life was full of misery. There was nothing here except for plenty of arum trees and swampy land. We didn't know where to live, what to eat and what to do. My father and many other seniors of that time collectively took the initiative of clearing this place. That was around a week of non-stop hard work before the first 8 or 10 of the houses were built. Some of us passed the nights here under the open sky, some preferred to live by the side of the road. We did not know where to fetch water. We used to go to a restaurant nearby to have a cup of tea and bring water in various bottles and pots.

.....Now when I look at this slum, I wonder seeing all these changes that have taken place so quickly. Now there are paved roads, water supply, electricity, televisions and what not. It's like a fairy tale that my kids won't believe if I tell them. It is only us who saw by our own eye would realise the level of sacrifice, dedication and hard work undergone to build this slum.

Abdul (56, Male)

The account above from Abdul who is living in Kalyanpur slum from the very beginning echoes the argument put forward by alterglobalisationists that commons are not readily found rather they need to be produced and reproduced by the commoners (De Angelis & Harvie, 2014; Federici, 2009; Linebaugh, 2008). Like Abdul, other senior respondents have also expressed their respective experiences of transforming the unknown space of the slum into their home. What is noticeable in this transformation process is the efforts to reorganise the space through establishing rules for access, use, benefit, care, and responsibility. Kalyanpur slum, therefore, is not merely a resource waiting to be appropriated but emerged as a form of social organization. By focusing on the social practices of establishing these rules, we can see the process through which the slum dwellers are transforming a piece of land resource into a commons.

Chapter Four elaborated the process through which these rules are manifested in Kalyanpur slum. Access has been found neither open to all nor just restricted to the slum dwellers, and the same goes for use, benefit, care, and responsibility. Where the uses of the spaces are characterised by sheer heterogeneity, the benefit extends way beyond the immediate jurisdiction of the slum. The practice of care and responsibility have suggested that the slum is not an unmanaged resource. It is rather by taking care of this resource and assigning various responsibilities among themselves that the slum dwellers attempt to prevent the tragic end of the slum.

Therefore, it is through these processes of establishing rules around these key five aspects that the slum dwellers transform the slum into a commons. These social practices distinguish a commons from private property. In a private property regime, these aspects are exclusively narrowed down to individual. These aspects have more restrictive definitions when it comes to private property. The process of managing these aspects as exhibited in Kalyanpur slum are also different from those where the rules are yet to be established (i.e., open access). For open access or unmanaged common, the absence of these rules is what brings the tragic outcome. Therefore, Kalyanpur is neither a private regime nor an open access pasture. It is rather a commons, carefully crafted by the commoners by establishing rules around these key five aspects that involves as Abdul mentioned “sacrifice, dedication and hard work”. It is through these practices of commoning that the slum surfaced around 32 years ago and continues to function.

Thinking of Kalyanpur slum as a constitutive process enables us to frame the daily activities of the commoners beyond the categorical notion of 'informal'. The discussion of informal settlements is largely influenced by the legitimacy of those activities or of property ownership. However, Linebaugh (2008) reminds us that the commoning of a resource does not necessarily depend on the legal status of the resource. Gibson, Cameron, and Healy (2016) argued that commoning can take place with any form of property, be it privately owned or open-access. This is exactly what is happening in Kalyanpur slum. By doing what they do on a regular basis, the slum dwellers are commoning a property which is nominally owned by the House Building Research Institute (HBRI). The common that has emerged out of this process includes privately-owned makeshift homes, public spaces, arteries, water bodies, shops, the bazaar, the open-access playground, and so on. Up against the seeming pressure of enclosure of a piece of land that belongs to a government department are the continuous (and often conflicting) efforts to common the space, to create an affordable living space in the very heart of the city. Therefore, theorizing Kalyanpur slum to be constituted through the activities of the slum dwellers transfers the focus from 'merely a resource' to 'a form of social production', from being solely a matter of 'property ownership' to the 'agency' of those commoners. In this respect, the Kalyanpur slum contrasts with the traditional notions of property relations based on ownership, and instead suggests that the slum is socially produced through the agency of the commoners; ownership doesn't matter much in this commoning process.

6.2.2 Kalyanpur slum is more than a 'subtractable resource'

A commons that is understood to have emerged through the process of commoning is different than a common that is understood as a 'subtractable' resource. The institutionalist scholars have argued that a common would possess 'subtractable' character. The 'subtractable' character suggests that a commons is a resource whose value diminishes through its use by its appropriators. An example is a forest or a water body from which the consumption of a tree or a fish results in that particular tree or fish not being available for consumption by others. In this understanding, a commons is a 'thing' or 'object'.

Kalyanpur slum cannot be distinguished as either subtractable or non-subtractable resource. Some elements of this commons possess subtractable character whereas some other elements do not. The piece of land on which the commoning take place in Kalyanpur slum obviously shows 'subtractable' character. Because it is a land resource on which building a house by one slum dweller reduces the amount of land available for others to build houses. Similarly, the

roads, paths, and vacant space of the slum might be conceived of as a subtractive resource. We can notice that this is how slums have been depicted predominantly in the literature as discussed in the first chapter, through the lens of subtractable physical resource where inhabitants compete for the resources. For instance, in most of the writing of RAJUK and similar minded stakeholders, slums have strictly been seen as a place of poverty resulting from rapid rural-urban migration. The framing suggests the shameful problem of slums in Dhaka are the unfortunate outcome of the rapid rural-urban migration and will definitely be erased if correct urban policies are put in place (Bird et al., 2018; RAJUK, 1995). The hegemonic narratives thus remain focused on the physical resource of the slum and its inability to cope with the rural-urban migration. Slums from this point of view are no more than congested localities with substandard housing and the unsanitary surroundings that accommodate people of low wage or no wage, who live a life of crime and are morally depraved.

However, shifting the perspective on process rather than a thing suggests that the slum is not all about the physical piece of land occupied by a group of people, rather it is a socio-spatial settling that is made and remade by its inhabitants as they actively use its spaces. Living in Kalyanpur slum is not only about the benefit gained by building a house on a piece of land but also about practising livelihood functions through various socio-economic activities as we have discussed in chapter four and five. The correspondence between the integrated spaces and level of activities performed at those spaces discussed in chapter five suggested that the highly integrated spaces in the slum are characterised by intensive livelihood activities. The dynamism of these spaces is manifested by mixing various realms of life, which are made possible by the sheer presence of the slum dwellers. Businesses such Razzak's firewood storage largely relies on the density of people at these inner spaces of the common. As Razzak explained about his customers:

You can see that my storage is very much inside the slum. The narrowed passages down here create problems in restocking my storage with supplies as no pedal van or rickshaw would be able to reach up to this point. Transport labourers drop the supplies near the main street from where me and my wife carry them with our hands. It is physically demanding and time-consuming. However, once they are all well stocked, we are tension free because these things are sold out very quickly.

.....there is a huge demand for this firewood as most of the people here use them for cooking. It takes less than a week before all this stock is gone. If you go to any house you would probably find them using firewood bought from us.

Most of the economic activities within the slum involve customers, producers, distributors, brokers, and retailers from within their community. So, while it is true that an increased number of slum dwellers put enormous pressure on the existing land, infrastructure, and service provision, the slum as a dynamic space also benefits greatly from its large population density.

The political realm of the slum dwellers, as much as their economic functions, is also advantaged by their numbers in their claim to their right to belong against any external threat. For instance, Hasina Begum emphasised the numbers when it comes to holding the ground against the eviction drives.

.....the only thing that works in our favour is the number. Though they are powerful, but we are in large number. So if we stick together, they will never be able to evict us from here.

On a similar tone, Borna (32, female) mentioned:

Our people is our strength. It is easier to break one stick but if you put 10 sticks together, it is not that easy. Similarly, if we are not united, it would be easy for them to evict us but if we are united, we can definitely outsmart them, as we did in 2016.

Their accounts suggest that they consider the high number of people as an asset when it comes to collectively holding the slum ground. They highly value the unity of their people which has been noticed throughout the interview process with the respondents. Therefore, it is an oversimplification to argue that the population density of the slum only works against their interest. Instead, the case study of Kalyanpur suggests that the act of living in a slum or consuming its space does not necessarily detract from but rather potentially increases the subjective socio-economic value of the settlement. Therefore, the exclusive 'subtractable' character as argued by institutionalist scholars is not quite applicable in the context of Kalyanpur commons.

6.2.3 Forming community in Kalyanpur slum

At the beginning, people used to migrate to this slum as a group. It was an advantage to migrate as a group. Because coming as group can help you building houses or increase family income. But, things has changed for a while now. Now you would find lots of single man and women coming almost every day.

....I also came here with my extended family from Bhola. Only two of my cousins remained here out of a total of seven people who migrated. Others have left the slum many years ago. I barely have any contact with my cousins now. I see them every now and then.

.....honestly speaking, it is my neighbours who I prefer to call as my family. My immediate neighbours are from North Bengal, however, living side by side with them for such a long period has made us like family members. In my opinion, you need others to survive here, not just your blood relatives.

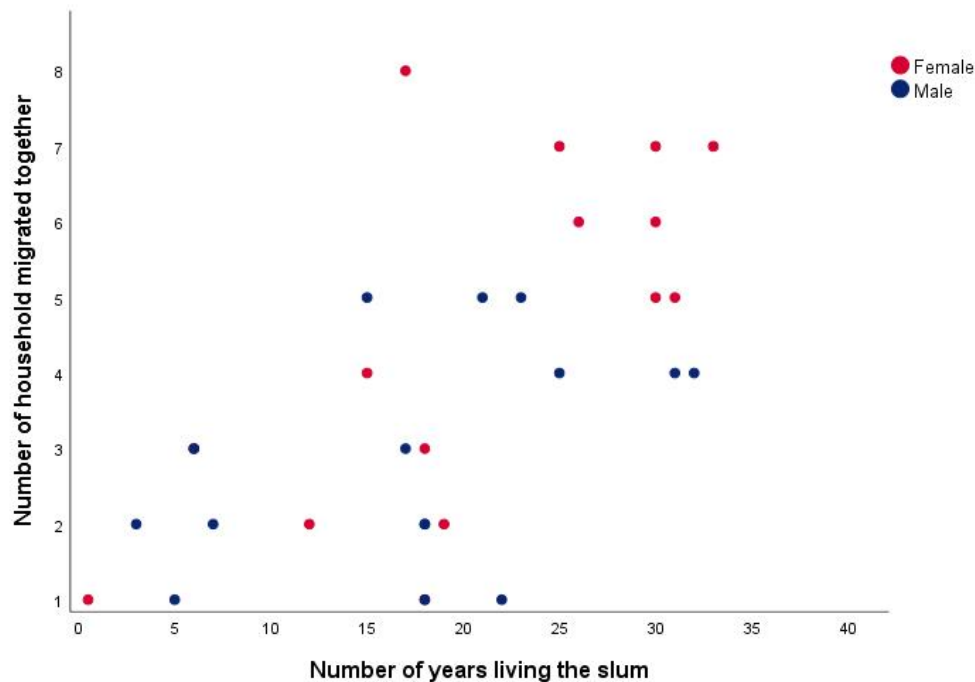
-Rumana, 39 female

Kalyanpur slum sheds light on the notion of community in the urban context. Federici (2009) argued that there is no commons without community. Forming a community is therefore important for commons to exist. Given the unique characteristics of urban, the way community is formed in informal settlements may be different compared to another context. What drives the initial formation of community in Kalyanpur slum? Ostrom (1990) suggested that a successful commons is built around a community that “share a past and expect to share a future” (p. 88). This argument suggests that commoning could be more successful in rural areas where population densities are relatively low and the people involved have lived and worked together for generations. The anticipation of long-term mutual benefit and the matter of trust is more obvious in rural areas compared to cities.

In contrast, we see that community in Kalyanpur slum is an unlikely mix of individuals and households from diverse background and sometimes different socio-economic statuses. Rumana’s account presented above suggests that though people initially migrated as a group (mostly from Bhola district) to this slum, but that pattern has changed now. This change is also reflected in the overall migration pattern of the respondents. Figure 6.1 presented below shows that the respondents migrated to the slum about 20 to 30 years ago came more as a larger group

of five to eight people compared to recent migrations where individual or smaller group migrations are noticed. Women used to be the part of these large group migrations compared to men. That is largely because of the cultural norm that discourages women to travel alone without accompanied by a family member. However, the individual and small group migration has proliferated after the eviction drive of 2003.

Figure 6.1: Group migration pattern of the respondents



Therefore, the community that has emerged in Kalyanpur slum now is the result of more individual and small group migrations of people who are not necessarily homogenous. The name of the settlement changing from “Bhola Colony” to “Kalyanpur slum” indicates that the slum community is not assembled on the basis of common geographic origin, and the situations that forced community members to migrate to the slum are not necessarily similar or shared.

Instead, the community that is formed in Kalyanpur slum is different from the own communities of the commoners back home. For instance, the relationship between Shorna and Razzak was not accepted by their own community in their village – a community with whom they probably share much of their social orientation, norms, and values. When they migrated to Kalyanpur slum, at first they were also not accepted because of their differentiated socioeconomic status (e.g., expensive clothes, good education). The community in Kalyanpur

slum, therefore, is formed without the default commonalities and established trust found in rural areas. This observation echoes with Huron (2015) and Udall (2019) who argued that community is not a prerequisite to urban commons formation, but formed through the active involvement in commoning.

Community in Kalyanpur slum is rather an ongoing constructive process just like the common itself. What made Rumana to consider her neighbours as family rather than her own cousins with whom she shares more commonalities, are those practices of commoning. Rumana mentioned,

When my husband had an accident, he couldn't go to work for 3 months. I also couldn't go to work because I had to take care of him. We were both worried thinking how would we pay the house rent. Our neighbour Alim Bhai and his wife assured us that they will talk to the landlord to waive the house rent until my husband could get back to work. We are really grateful to them as they managed to convince our landlord to give us a waiver. Other neighbours also helped us at that difficult time by offering food and loan.

Rumana's experience not only indicates the ongoing helping and caring practices in the slum that builds community cohesion but also the way they value and nurture relationship (similar to Hashmot's experience mentioned in chapter four). This may not be the case that all the landlords would behave the same way as Rumana's landlord, however, trust and reciprocal supports play a key role in the formation of community in Kalyanpur slum. What made Shorna and Razzak eventually become a part of the slum community was their careful efforts to be in common with the community. Shorna's day-to-day activities to improve the living conditions of slum dwellers through NGO programmes, her voluntary efforts to provide tuition to children of slum dwellers, and her active support teaching people how to write their name together transformed Shorna into a state of 'being in common' with the slum community.

Thinking of the slum community as an ongoing constructive process is very different from how most studies of slums (such as Bird et al., 2018; RAJUK, 1995; Soto, 2000) have framed their communities: as static, homogeneous, and pre-given (except for some recent studies that avoids such simplifications such as Alam, McGregor, & Houston, 2020 and McFarlane, 2012). Such simplistic notions of community are challenged by Huron (2015), who argued that there is a "dialectical" relation between commoning and the formation of community, and that

understanding one without another is problematic. It is the commons that they collectively care for, and these practices of commoning are a binding force that constitutes the community.

We can see from the case studies presented in this research that the dialectical relation between commoning and the commons is quite evident throughout the slum, an important characteristic of the informal settlement that is often overlooked. Both Rumana and Shorna fled their village to pursue the life of their choice; Rojina came to the slum not thinking of livelihood but to search for her husband. For them, the slum community was not pre-given; it was a hostile and uncertain space yet to become their commons. It was through the process of commoning that they became the part of the community, and in doing so they contributed to the construction of the commons. Additionally, the uneven power dynamics in the slum also suggests that the community is not homogeneous. Local leaders exercise their power over the people to extract benefit for their own gain. Despite this power difference, they are the part of the community as they are able to make decisions about the slum. What these heterogeneous groups share is what Nancy (1991:2) calls “being-in-common, or being-with”. This observation contrasts with institutionalists claim that commoning works best in homogeneous communities.

6.2.4 Kalyanpur slum does not possess an entirely ‘nonexcludable’ character

Understanding the way of community formation in Kalyanpur slum contributes to the ongoing tension in the commons literature to think of commons either open to all, or accessible only to members. If community is formed out of ‘being in’ commons or ‘being with’ commons, then how the matter of inclusion and exclusion are balanced? Institutional scholar have argued that a commons will possess an ‘nonexcludable’ character meaning that a common would be rivalling as it would be difficult to exclude potential beneficiaries from using the resource. If we remind ourselves the way in which the access to the slum is managed between ‘open access’ and ‘restricted’, we can see how this matter of ‘nonexcludability’ is negotiated in Kalyanpur slum.

At first instance, it is very convenient to think of Kalyanpur slum as non-excludable as the access to the slum is wide. The housing affordability makes the slum an attractive destination for many who migrate to Dhaka in search of jobs like Rumana’s family. The rate of migration in Kalyanpur slum has increased ever since and it is difficult to exclude people from migrating and settling into the slum. From this point of view, Kalyanpur possesses ‘nonexcludable’ character like CPR. Moreover, it is not only the slum dwellers but also there remain various

other stakeholders who access the slum on a regular basis. This is what makes the access to the slum wide and often contributes to the contested nature of space in Kalyanpur slum. The dispute over the Bell-Tola field as discussed in the previous chapter is an example. Bell-Tola field is accessed by the HBRI staffs, the residents of the nearby gated quarters, supporters of the local MP, and authorities such as police in addition to the slum dwellers. These groups compete to take control over this piece of land which is literally situated within the slum settlement. The slum dwellers are engaged in a continuous struggle to claim their rights to not only this piece of land but also to the entire slum area in order to secure their livelihood. In this sense, Kalyanpur slum exhibits the 'nonexcludable' character because it is difficult for the slum dwellers to keep the slum out of the reach of other interested parties.

However, a careful analysis of the process of balancing access to the slum indicates that nonexcludability is not possessed entirely. There are some social mechanisms in place that prevents outsiders to take advantages of the slum. Widening access to the slum doesn't mean that the access to the slum is open. There remains a process of deciding who is included and who is not. Not everyone can build a house if they want or live within the slum; in fact, who can and cannot stay or live in the slum is codified. Not everyone can run a business of their choice. Slum dwellers have a high degree of socio-political intolerance for people who are not conceived as 'us' as far as building or renting a house in the slum is concerned. The existing social code of conduct determines who may be considered as 'us' and who won't.

The migration pattern of the respondents suggest that having contacts inside the slum makes the initial access to the slum easy, but they could still be treated as 'outsiders' unless there are some active efforts from the migrant to be a part of the constitutive process of community formation. In this regard, Shorna's (39, female) account is highly relevant. She believes that it is important to understand the intention of the people who want to rent a house in the slum. Shorna herself migrated to the slum as an outsider and bought a two-roomed house from an old lady where she lives with her husband. Shorna now has a spare room became available to rent after the previous tenant left the slum just after two months from renting.

There are two types of people seeking room in the slum. One is I would say the selfish type. They would just take advantages of the cheap rentals of the slum. These types of people would live in the slum but in their mind, they would hate to mingle with us. They won't take part in any community activities. Some of these people would even

come here to hide themselves from political rivals. They would leave the slum as soon as their crisis is over. We hardly consider these type of people as our own.

.....On the other hand, there are people who you can tell from their appearance that they are of good heart. They value the relationships and would help others when needed. I only offer my rooms to this type of people.

The criteria of considering outsiders as ‘one of us’ as expressed by Shorna is present across the slum and has implication on how nonexcludability is negotiated. The prevailing norms and values of the slum dwellers often make it difficult for new migrants to be absorbed in the slum community. Stories from various cases discussed in chapter four also suggest that some sort of reciprocal support, voluntary activities, and community works are needed for ‘outsiders’ to be in common with the insiders. This notion of ‘us’ and ‘others’ is not only shaped by economic background but also in large part by such factors as political affiliation, social networks, and geographic origin. The prevailing code of conduct in the slum makes it easy to identify ‘others’ who are outsiders, and what benefit could be derived by those outsiders is highly controlled by existing socio-political norms. These existing codes of conduct keep undesirable beneficiaries away from benefiting from living in the slum.

The slum is also benefited politically from the existing socio-political norms and values that trigger the efforts to claim their rights to space. For instance, people living in the slum are expected to take part in the demonstration or not to conduct anything (e.g., building houses on the disputed land, running a video game store) that may go against the interest of the greater slum community. Anyone who does not abide by these principles is considered as a defaulter and may face consequences such as banning entry to the slum. This mechanism keeps the slum away from being an open access. Therefore the ‘nonexcludable’ character also is not entirely exhibited in Kalyanpur slum.

6.2.5 Commoning is a rational choice of the slum dwellers

....I do not have any asset back in my village. All are washed away by the river. All I have is this very tinny house here. If they take this away from me, where shall I go? What would I feed my family? How would I manage their expenses?

Hashmot (43, male, construction worker)

Many commons scholars have argued that urban commons emerges out of the response to privatization, as a campaign against eviction and demolition or as a movement against climate change and so on (Dobson, 2017; Thompson, 2015; Udall, 2019). They argue that urban commons are influenced by the motive of political activism against various threats or inspired by a particular desire, ideology or new social order. However, similar to Huron (2018), I argue that commoning in Kalyanpur slum is a pragmatic choice of the commoners. They engage in commoning activities because this is what they need to do in order to survive.

In Kalyanpur slum, commoning is not an easy job to continue. In order to common in Kalyanpur slum, the commoners first need to reconcile with the socio-economic and geographic differences. Negotiating differences could be easier in a homogenous environment like rural settings as discussed earlier. However, in the slum, the members of diverse background possess diverse interests and various degree of commitments towards the slum. For instance, the way uses are negotiated in Kalyanpur slum indicate that there exists an intensive process of discussion, debates, and conflicts to determine the use of spaces. It is through these discussions, debates, and conflicts that they came up with the collective decision of opposing the establishment of the video game store inside the slum or banning Shikder from the slum for trying to break the status quo.

This process of negotiation can also be noticed in the way the regular slum dwellers had to convince the slumlords to allow NGO programme in the slum. The slumlords were sceptical at the beginning regarding NGO interventions into the slum and many of them are still critical to NGOs. Before any NGO programme can run in the slum, these slumlords would have to be informed and have to gain support from them. As Borna remembers:

Things have changed a lot but there was a time when it was not easy for NGOs to work here. They first needed to get permission from local leaders to run their programme. When DSK started the WATSAN programme around 15/16 years ago, many local leaders opposed thinking that maybe this programme is intended to convert us as Christian. After a series of heated debate, we were able to convince them that it is not a religiously targeted programme and will bring only good to us.

What is suggested from Borna's experience is that the regular slum dwellers are in constant negotiation among themselves before they can collectively take decisions about their commons. The internal power dynamics of the slum often make this task very challenging for

the commoners who first need to overcome the differences in their perspectives. It takes effort from the side of the regular commoners to come into terms and reconcile their differences as their community includes a heterogeneous group of people. Overcoming differences is very important for them especially when their struggle is up against powerful stakeholders such as the local MP or the authorities. Borna further expressed her feeling about negotiating terms with others saying:

Sometimes relationships are worsened due to disagreements. My husband often asks me why I get involved in these matters. I understand why he says that but I tell him that we have to keep doing our part. Because we remain as long as the slum remains. What is good for the slum is also good for us. So I shall keep doing what is good for the slum.

This ongoing struggles of the commoners is a fundamental characteristic of urban commons (Huron, 2018; Kornberger & Borch, 2015). They struggle to define access and use to identify the community of benefit and establish protocols of responsibility and care. Despite this struggle, commoners such as the slum dwellers remain committed in their commoning practices largely because this is what makes the most rational sense for them. A city like Dhaka, with its very urban characteristics (e.g., diversity and density), creates a particular urban condition that puts the commoners into a rational mindset. If this commons is seized from them, it would have a devastating impact on their socio-economic wellbeing. It would be very hard to ensure household wellbeing for people like Borna or Hashmot whose statements above suggests that their very existence is crucially linked to the existence of the slum. For most of the slum dwellers, it would be extremely difficult to not only find an affordable place to live but also to be recognised, valued, and absorbed into the wider society as suggested by the stories of Babla and Rohima who struggles to find a place to live during eviction drive of 2016 (discussed in chapter four). Therefore, when they actively engaged in the act of commoning, they make a rational choice out of their daily socio-economic need.

Gibson-Graham (2006) pointed out that people don't wake up wanting to be a revolutionary, they wake up wanting a job. Kalyanpur slum emerges as a commons not out of the desire of the people to be revolutionary or to protest against the hegemony of global capitalism but out of the common urge of earning a living and securing a place to live. In that process, they collaborate, help, care, negotiate, avoid, and sometimes are in conflict with others.

However, this doesn't mean that commoning in Kalyanpur slum lack political vision. In fact, political and economic motivations are so tightly integrated in Kalyanpur slum that it is difficult to get a separate sense of them. When they demonstrate against the eviction drive or chant slogans against the local MP at Bell-Tola open field, they are clearly taking a political stand against land grabbing by the state and political elites. But these political stands are also informed by their collective realisation to protect their means of subsistence: the commons. This political aspect of commoning distinguishes Kalyanpur slum from CPR. Commoning in Kalyanpur slum involves more than managing a land resource and is characterised by political struggles. Therefore, the act of commoning in Kalyanpur slum is rather a rational choice of the commoners, manifested through economic and political actions. It is through this rational decision-making process that the people from a diverse background in Kalyanpur slum can come together to engage in commoning.

6.2.6 Expressing the spatiality through the notion of boundary

We used to go as far as Natun Bazaar point for simple services such as mobile top-up, buying small groceries and so on. But now, all these are available on our doorstep. In last few years, this section of the slum has become more developed with more businesses started to operate.

Babla (35, resident of section eight)

Commons are fundamentally socio-spatial. As discussed earlier, they are not found but must be constructed by purposeful human activities distinguishing the commons from the surrounding environment. The way commons are distinguished from their surroundings is through the notion of boundary. Boundaries define community, the crucial element of commons formation. It defines the spatial limits of the commons and the community. A boundary is, therefore, the spatial expression of the commoners, experienced through everyday occurrences. More often than not, a boundary is manifested in physical form through the collective actions of the commoners.

For a resource to be transformed into a common, it must widen access to it, yet some form of boundary is indispensable to prevent it from being an open access. The study of Kalyanpur slum suggests that apart from the existing social code of conducts, the limited availability of land within the defined boundary of the slum also prevents outsiders to build new houses inside the slum. Kalyanpur slum has a clearly identified boundary which is more or less indisputable.

The slum dwellers are very clear about where the slum begins and where it ends. Institutional scholar argue in favour of such clearly demarcated boundaries for commons to be successful. They have focused on concrete and tangible experiences of commoning particular resources (i.e., housing, land, food), especially in relation to social reproduction.

However, alterglobalisationist scholars are in a dilemma when it comes to the boundary of the commons (De Angelis & Harvie, 2014; Nonini, 2006; Stavrides, 2016). They conceive a boundary as a potential means of enclosure that may eventually look like capitalism. They often argue that commons that are created from what was previously in the hands of state (e.g., public spaces and parks), a boundary in that context possess a dilemma of enclosing the commons that has been otherwise open to a wider public. Following this dilemma imposed by the boundary, some alterglobalisationist scholars have argued that commoning is the right to manage but also the right to exclude (Lee & Webster, 2006; Moss, 2014; Thompson, 2015). Harvey (2012) considers enclosure a temporary political means to pursue a common political good. So the question placed by the alterglobalisationist scholars is how to create commons without necessarily turning them into the enclaves of ‘collective private’ (Stavrides, 2016).

The spatiality of Kalyanpur slum suggests that although intrinsically excluding, boundaries can also be an element that helps commons thrive. But in order to understand the inclusive nature boundary, our investigative focus has to be at the inner configuration of the commons rather than the external physical boundary of the commons. The case of Kalyanpur slum illustrates that the spatiality of commons is not necessarily expressed through the notion of a bounded encompassing geometry (e.g., the border of the common). Rather for a dynamic urban commons such as the slum, we need to pay attention to the inner spatial organization.

Studying the spatial configuration of Kalyanpur slum has suggested that the inner spatial configuration of the slum has been changed while the slum dwellers engaged in the practice of commoning. They have established the rules around the access, use, benefit, care, and responsibility of their commons and while doing so, they have turned the land into a more organized collection of spaces. The increasing intelligibility and synergy score of their overall spatial configuration suggested that the emergence of the common has not been haphazard, unplanned or chaotic. The entire development of section eight of the slum that Babla was talking about indicates that it followed the existing organizing logic of the space. A house has not been built on the middle of anywhere but has been placed next to each other in a way that

follows a pattern. Exploring the land cover change for the last 17 years have suggested that the slum now has more clusters of integrated spaces: hubs for retail and commercial activities.

What is interesting to note from studying the spatial configuration is that the slum is not a single space, rather a collection of spaces that have emerged through the social practices of the commoners. The inner edges of these spaces perform the tasks of being porous and fuzzy, therefore not necessarily being exclusive. The correlation between the activity locations of the respondents and the spatial configuration of those locations suggests that most of the activities take place at spaces of higher integration. These highly integrated spaces that allow commoning activities to unfold there are located inside the slum as well as at the edge of the slum. The main two arteries that have cut through the slum from the north are among the most integrated spaces as well as the most dynamic part of the slum. These two arteries are located at the eastern edge of the slum, however, the dynamism exhibited at these places results from the interaction of people from both inside and outside of the slum. These are the places where the difference between inside and outside is blurry. Jorina (30, female) whose restaurant is located on such an edge of the slum considers external customers as a blessing:

This is a very good location for my business where I get plenty of customers from outside. They would always pay by cash straightway unlike many people from the slum who prefer to pay later. I run my business mainly targeting those outsiders. They come from all sorts of backgrounds but mainly like us; poor and hardworking people.

Like Jorina, there are many other retail operators who are benefit from these edges that allow the intermingling of the slum dwellers with others. The dynamism of these places suggests that these edges are not necessarily exclusive but generative.

The spaces of high integration that are located at the core of the commons have also presented interesting findings. Being located at the core, these spaces do not necessarily include a wide range of people from outside, however the slum dwellers, by mingling various realm of life, ensure that every inch of the space is being used. These are the spaces where the margin between what is 'mine' and what is 'ours' is minimal. The dichotomy of public and private makes no sense here. The transition between integrated space and segregated spaces are noticeable within the slum. The segregated spaces usually account for household activities, however, most of the households in the slum are also engaged in entrepreneurial activities with houses being the primary site of their production.

The correspondence between the integrity of spaces and the location of commoning has enabled us to identify the site of conflict in Kalyanpur slum. The tension between the slum dwellers and the 'others' are not necessarily manifested at the border of the commons, but rather located at the very inside of the commons. The Bell-Tola open field has been the subject of contestation between the slum dwellers and HBRI for a long time. Both parties have tried to exercise their control over this field by attempting to build new structures. Against the ongoing enclosure attempts by HBRI, the slum dwellers have collectively expressed their opinion at this very space by demonstrating. This is a highly integrated space but marked with conflict and contestation.

Therefore, focusing on the spatial configuration in Kalyanpur slum has not only brought a new perspective about the spatialities of commons, but has also highlighted the heterogeneous characteristics of various spaces within the common. It shows that boundaries are not necessarily exclusive but can also be the site of producing commons. They can be the site of interaction between commoners and others in a generative way. Moreover, commoning is not uniformly distributed across the commons, instead of in the context of urban informal settlements, some spaces offer more opportunities for commoning compared to others. Ostrom (1990) in her design principle of commons argued that for a commons to be successful, the resources need to be handled by the commoners themselves more responsibly and by necessity with more regulations. However, the problem of scale remains problematic in her design principle as we don't know how a large-scale commons can be managed responsibly by the commoners as small sized. Informal settlements in this context possess a challenge to this principle compared to other urban commons, such as community gardens or co-housing projects where use and access can be monitored easily. What we learn from Kalyanpur case is that for a large-scale commons, these responsibilities are not necessarily uniformly spread across the commons. They can vary space to space, creating inner edges between spaces and by studying the spatial configuration of the commons we can reveal the way the commoning practices are manifested differently. By paying attention to these inner boundaries, we are also able to identify the sites of economic opportunities as well as the sites of political struggle.

6.3 Challenging the hegemonic understanding of slum

Throughout my research and especially during the fieldwork, I kept wondering how the dynamic space of a slum could be widely understood in terms of negative connotations! Probably because, as Lombard (2014, p. 5) said, so far our tendency has remained to refer to

slums as a ‘problem’ to be addressed instead of a phenomenon to be understood or engaged. And this approach to understanding slums as a ‘problem’ started from the Victorian era of industrialization when this very term ‘slum’ used to describe the substandard living conditions of industrial workers. With descriptions of their housing conditions such as ‘room of low repute’ or ‘low, unfrequented parts of the town’, slum dwellers were characterized as ‘poor’ and ‘subordinated’ people who were in desperate need of reform (UN-HABITAT, 2003). Centuries later, the contemporary understanding of slum still carries similar notions. In most scholarly debates, policy advocacy, regulatory frameworks, and public discourse, the term ‘slum’ still indicates poor housing, overcrowding, lack of services and facilities, and insecurity of land tenure.

The case of Kalyanpur slum clearly poses a serious question for such a generalisation. While it is true that Kalyanpur slum suffers from inadequate services and facilities, understanding the slum only through the language of ‘lack’ and ‘inadequacy’ does not do justice for the thousands of people living in it. Kalyanpur slum is more than just the concentration of poverty. The problematic understanding of American ‘ghetto’ or British ‘slum’ cannot be used to capture the kind of dynamism and agency we exhibit in informal settlements such as in Kalyanpur slum.

Kalyanpur slum, when theorised as a commons, broadly challenges the two dominant presumptions about urban informal settlements. It challenges the notion of slums understood purely from a housing and shelter perspective and it also challenges understandings of slums as illegal/extra-legal settlements. It is important to shed light on these predominant conceptualisations as they have a significant influence on the design of various approaches regarding the informal settlements. Providing low-cost residential flats/housing, improving infrastructure, and providing land entitlements just a few of the popular policy directions that have been derived as a result of the emphasis on slums’ physical characteristics and the legal aspects of slum-like settlements. Therefore, it is important to know the extent to which such conceptualisations can be disrupted by adopting a commons framework in the discussion.

6.3.1 Kalyanpur slum is more than ‘the collection of poor housing’

The key observations we discussed above contrasts significantly with the housing and shelter-based conceptualisation of slums. The housing condition such as the material types, availability of living space, provision of services and facilities such as water supply, sanitation, electricity,

and so on are without any doubt below standard, or not adequately served, within the settlement. But these inadequacies exist because of the 'illegal' status of the settlement that hinders the ability of the commoners to improve these conditions. Most of the respondents stated that the eviction threats and potential of fire hazards demotivate them to invest in their housing conditions. For instance, my senior respondent Hasina Begum, described how the fear of eviction has haunted her since 2003, preventing her from further investing in her dwelling:

There is always this uncertainty about tomorrow. That's why I don't think of changing my house's bamboo and steel sheet material and have never thought of buying good furniture. I know I might need to run again at any time.

Like Hasina Begum, most of the respondents I interviewed described that they are capable of improving their living conditions. Despite many of them having the economic capability, the previous experience of losing their valuable household assets during eviction and fire restrain themselves from investing in their housing condition further. The increased number of households having access to water supply, sanitation, electricity, waste disposal, and so on suggests that with improved stability, they are collectively as well as individually capable of improving the living condition within the slum.

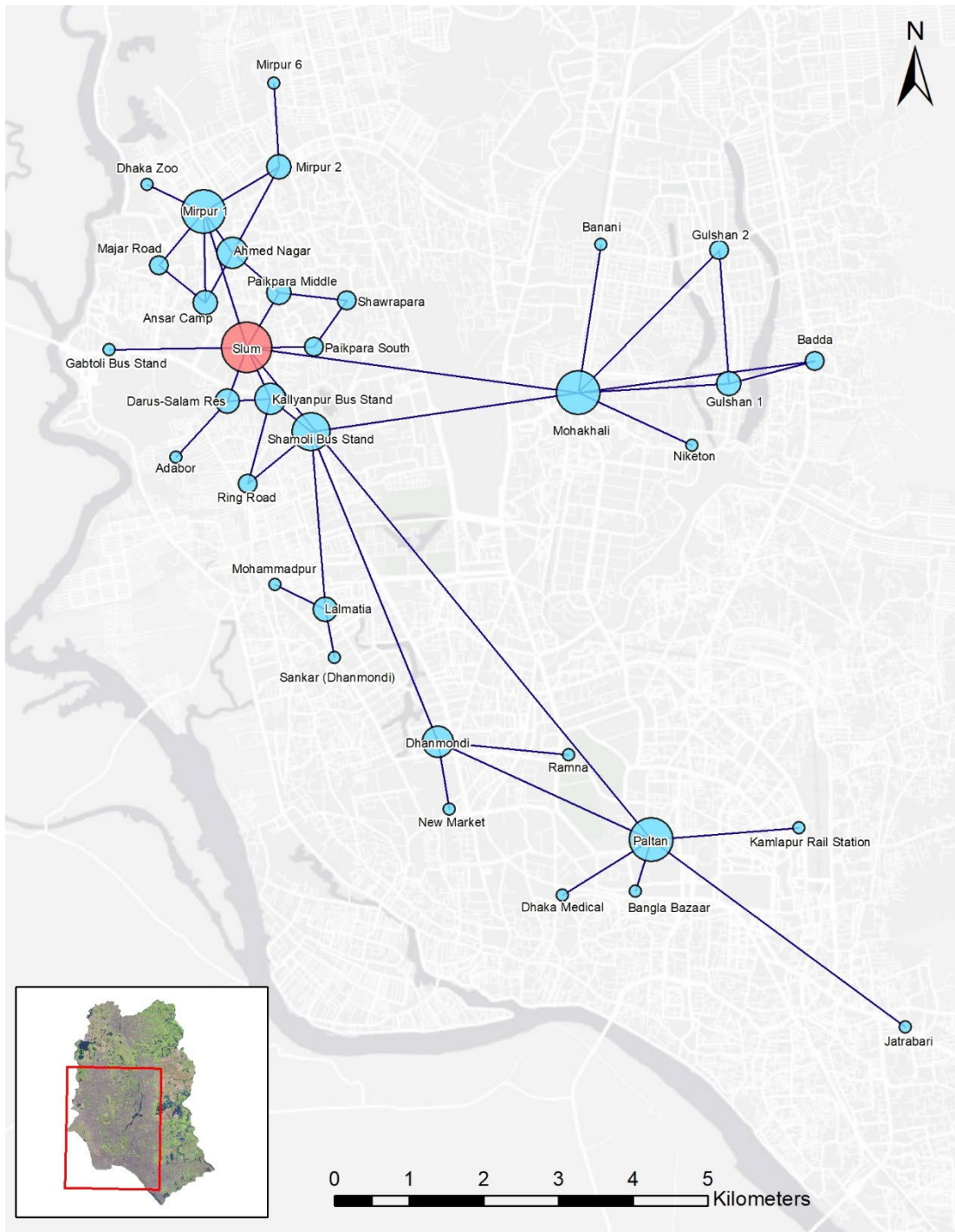
Moreover, these inadequacies could be considered as particular conditions prevailing in the settlements but should not be used as the criteria for conceptualising or defining these unique socio-spatial settings, because a slum is more than just housing and shelter for the 'poor'. The socio-spatiality of Kalyanpur suggests that the slum has more functional implications than just serving the housing needs of its residents. The slum is built around the synergy between residential and various non-residential functions. The highly integrated spaces in the slum are marked by intense income and non-income-earning activities. Various realms of life are closely intertwined at these places through the practice of voluntary activities, recreational activities, wage-earning, reciprocal support, and so on. The same goes for the houses within the slum which are not just units for household activities but are the very centre of entrepreneurial activities. There are active and conscious efforts in place to organise their houses and also the spaces around them in a way that supports their material as well as social and communal wellbeing. A housing and shelter-based conceptualisation is a clear shorthand to understand the sheer dynamism exhibited in the slum.

The housing and shelter-based understanding often implies that a slum is disconnected or isolated from the rest of the city. As if slum too, like the flawed conceptualisation of American ‘ghetto’, is a segregated part of the city that exists just to provide residential support to the ‘poor’, and as if a slum has barely any forward or backward functional linkage with the wider city. In contrary, Kalyanpur slum suggests that it is not cut off from the rest of the city but rather exhibits varying degrees of connectedness materialised through the livelihood practices. For instance, the two main arteries—the lifeline of the slum—connect the slum with the outside. It is here where the outside meets inside in a wide array of commoning activities that make it difficult to distinguish the slum from the city’s other urban spaces. The slum is also connected with various distant part of Dhaka as presented by the graph visualisation in Figure 6.2. The figure is produced from the collection of all the out-of-slum locations that the respondents interact with, such as the location of their vending activities (e.g., fish and vegetable vending), the location of purchasing supplies for their retail business, location of labour offerings, location of picking trash, and also the locations from where customers visit the slum to purchase products and services, such as home-grown chicken, eggs, or tailoring services.

Figure 6.2 suggests that the retail business, as well as the productions in the slum, rely on supplies from Platan, Mohakhali, Gulshan, Dhanmondi, and so on. The services and products offered by the slum dwellers have customers from various other neighbourhoods such as Mirpur, Paikpara, Shamoli, and many more. Therefore, the commons has both forward and backward linkages ranging far beyond the immediate jurisdiction of the commons. Additionally, as discussed earlier, the benefits from the slum and its people are realised well beyond the physical borders through the links and connections established by the slum dwellers while performing their commoning practices. The slum is not isolated or disconnected from the rest of the city, but rather takes input and offers output to the wider urban system of Dhaka.

The housing and shelter-based understanding of slums often refer to the slum dwellers as reserved labour who lack the qualifications they would need to be absorbed by the formal sector. However, Kalyanpur slum like most of the slums in Bangladesh emerges as a conglomeration of entrepreneurial activities and not just a collection of surplus labour waiting to be absorbed into the formal job market.

Figure 6.2: A Graph visualization of the connections between the slum and rest of the city



Each of the nodes in the above figure represents a location in Dhaka (labelled). The size of the node is proportional to the frequency of contact between the slum and that location. This data has been generated from the interviews of the respondents and their GPS tracked location. The visualization is made using open-source software Gephi¹ (version 0.9.2) and ArcGIS (10.4). The order in which these nodes are connected to each other represents either a direct contact between the slum and a location or contact via other locations. The second and third tier contacts are mostly resulting from mobile vending and construction activities of the respondents in their sequence of visiting those places. The graph shows that the slum is connected with various part of Dhaka through various input-output linkage. This finding contrasts with the argument that a slum is isolated or spatially segregated from the city.

Figure 6.3: Earning an income from within the slum

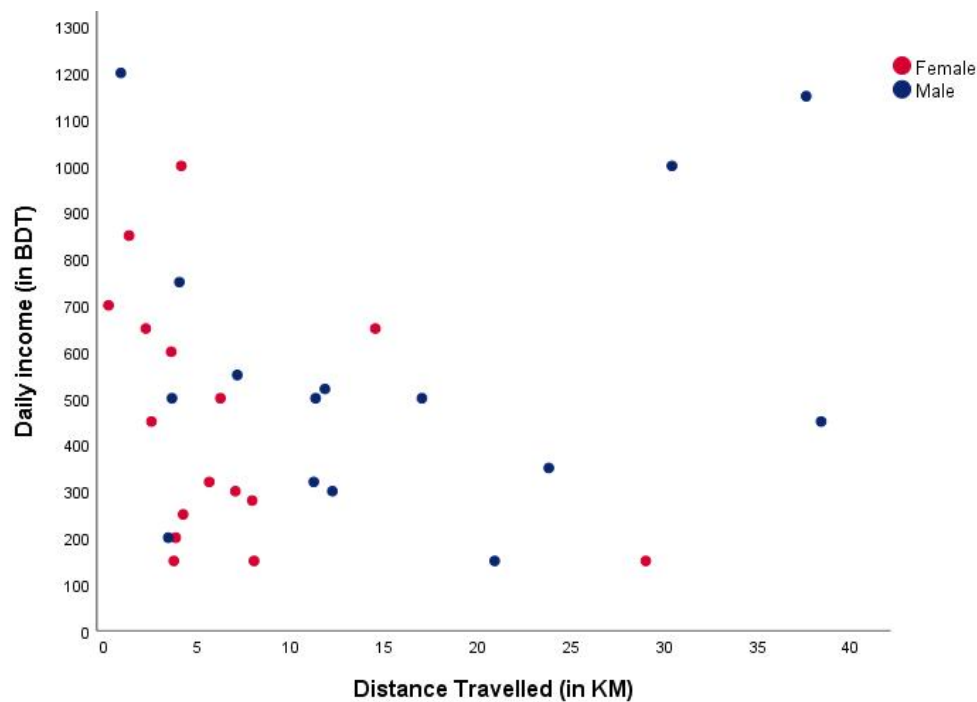


Figure 6.3 presented below indicates that most of the earnings of the respondents are generated from within the slum. Plotting the daily income earned against the total distance travelled in a day by the respondents illustrates that income is not necessarily associated with locations that are outside of the slum or far from their neighbourhood. Though there are many living in Kalyanpur slum who are garment workers or who sell their labour in the various formal and/or informal sectors located far from the slum, it is the entrepreneurship and production of the slum through which most of the earnings are generated. Most slum dwellers are employed within the slum, from where most of the businesses are operated. Home-based entrepreneurship is an essential element of Kalyanpur slum and confirms the importance of the slum house as a productive asset and its role in promoting economic activity, an argument similar to that made by Grant (2010).

The ways in which the entrepreneurial activities in the slum are unique is the advantage taken by combining the two key resources: space and labour. As discussed earlier, without necessarily any functional loss, the spaces of the slum as well the houses within the slum are used for both social reproduction (care work, cooking, cleaning, resting) and income-earning labour (shop, tailoring, storage, restaurants). This combination often allows them to convert time spent on domestic work into time spent working in their business. For instance, Jorina

while initially running her restaurant business used to extend her cooking for the household to produce food for sale in her restaurant. Now that the demand for her restaurant has increased, she does it in the reverse order. Any food that is not sold in her restaurant by the end of the day is consumed by her household. She believes that this process helps her to keep the cost down and increase her profit from the business. Similarly, business activities within the slum add the benefit of having family members as employees which reduces the labour cost and provide flexibility in working hours. Figure 6.3 indicates that it is more the women respondents whose earnings are generated primarily from the slum premises. Given the higher number of women engaged in home-based entrepreneurial activities compared to men, this finding makes sense. Interviews of the women respondents suggested that they prefer earning opportunities in close proximity to the slum because that allows them to take care of the children and the elderlies quite conveniently. For instance, Nazia (35, female) who used to work for a garment factory mentioned that she won't ever work for a garment factory again even if it pays more than her current income.

I am very happy to accept a lower income from my current business than going back to work for a garment factory or as a maid outside of the slum. Because my business allows me to take care of my family; especially the kids.

Nazia also hinted that her business allowed her to be not only economically independent but also increased her stake in decision making within her family.

These findings contrast with the view of slum dwellers as a 'reserve army of labour' or as 'a stealth workforce for the formal economy'. Against the argument put forward by economists such as Dijkstra (2011), Farrell (2004), Kenyon & Kapaz (2005) and La Porta & Shleifer (2008) that informal activities are inefficient, unproductive, and practised as the last option by the slum dwellers, the case of Kalyanpur slum suggests that the entrepreneurial activities are instead strategically decided and carefully implemented commoning practices of the slum dwellers.

Therefore, I argue that a commons perspective on the slum reveals more about slums than the narrowly-defined housing and shelter-based conceptualisation. Kalyanpur slum, when understood as a commons, is rendered as a socially dynamic and spatially heterogeneous settlement, contrasting with the pervasive understanding of informal settlements as a static 'spatial unit' resulting from 'unmanaged' urbanisation. The slum is marked with the

intermingling of the public and private realm of life, spatially organising the spaces and ensuring multiple uses of them, establishing and negotiating the rules about the shared management of the space. It is also marked with conflicts, contradictions, and struggles to transform the space into a means of subsistence. These characteristics of slums pose serious question to the oversimplified understanding of informal settlements deriving from the Western conceptualisation of ‘slum’ and ‘ghetto’. At times, the commoning practices of the slum dwellers may look like the political struggle of those who are left behind by the liberal economic model of development (De Angelis & Harvie, 2013; Hardt & Negri, 2009). Or it may look like a process of reclaiming space that would otherwise be enclosed or privatized by the state or powerful elites. But more importantly, I argue echoing Gibson et al., (2016) that these are regular day-to-day activities of the commoners. This perspective allows us to frame their struggles and efforts as a constructive process of creating commons rather than simply categorising them as ‘informal’ activities or the settlement as the collection of ‘poor’ housing units.

6.3.2 Kalyanpur slum is more than the legal/extra-legal dilemma

Kalyanpur slum has been the subject of demolition so many times based on the ground that the slum is ‘illegally’ established on the land owned by HBRI. In this context, if we consider the categorisation of influential economist De-Soto (2000) based on means and outcome where he equated informality with extra-legal activities, then we see that in case of Kalyanpur slum, the government and powerful elites are much better at informality than the slum dwellers. The eviction drives (the means) conducted by the authorities are illegal (ignoring the existing High Court stay order, not following the minimum notice period required before eviction) though evacuation of the land for the use of the government agency (the end result) is legal. The same could be argued of fire incidents thought to have been engineered intentionally by a local MP. Therefore, if informality is equivalent to extra-legality, then informality is not only the domain of the ‘urban poor’ but also that of the state and powerful elites.

In reality, as argued by Roy (2005, 2011), formality and informality may be remarkably complex as often a mixing of legal and illegal arrangements is involved. For instance, Kalyanpur slum is recognised by the government to some extent. This is particularly evident in the existence of a water supply and electricity connections all over the slum. Moreover, as mentioned earlier, all the NGOs need prior approval from the NGO bureau to implement projects in the slum, which include micro-credit, infrastructure improvements, and provision

of services and facilities. The intensive presence of NGO projects there thus indicates that the government intends to improve the living conditions of the slum dwellers through the NGOs. Yet, the eviction drives regularly conducted by the government suggest otherwise. So, the situation prevailing in Kalyanpur slum does not conform to any binary division of legality and illegality. Kalyanpur slum is rendered both 'legal' and 'illegal' at the same time, to various degrees, and its association with one category over the other is problematic.

What has been advocated from De Soto's analysis is some sort of land titling. De Soto advised that individual property ownership is the best way to tackle the tenure insecurity problem in the informal settlements. He argued in favour of private ownership of land assuming that the individual entitlement will unlock the monetary potential of the resource being held by the slum dwellers, which in consequence will help the 'poor' escape from 'poverty'. This argument is similar to that put forward by Hardin (1968) in "The Tragedy of the Commons". Although De Soto does not explicitly state that 'formal property' is equivalent to private property, Bromley (2004), Cousins et al. (2005) and Van der Molen (2012) observe that this is clearly the assumption. Like Hardin, who predicted the tragic outcome of a commonly managed resource, De Soto talks about informal settlements as 'dead capital' in the absence of formal recognition. As Hardin, in his example, proposed to divide the meadow among the herdsmen to establish individual ownership, De Soto advocates for capitalizing the 'dead' capital through formalization, which implies having a strategy for the creation of individual private property.

However, the analysis of commoning in Kalyanpur slum suggests that the commoners are not a homogeneous group, as imagined by De Soto. The ability of the commoners to benefit from individual entitlement varies significantly as most of the houses are owned by a few slumlords, many of who live outside the slum. In the complex owner-tenant pattern that has been exhibited in the case of Kalyanpur slum, private entitlement becomes problematic in recognising the varying interests of the diverse stakeholders, that is, the tenants and the house owners, the latter of who may live outside of the slum. Interviews suggest that most slum dwellers are sceptical about the role of the slumlords who benefit from the rent provided by the ordinary tenant when they do not own the land and in many cases do not even live in the slum. Therefore, it is not a straightforward process to identify which 'individual' qualifies to get the title.

Based on De Soto's understanding of property, another attractive proposal has been made in favour of group or collective entitlement instead of individual entitlement. Such policies of 'regularisation' or 'formalisation' have gained significant attention from policymakers. For

instance, the current FYP (2016–2020) of Bangladesh indicates the government's preference for collective land tenure rather than the individual kind proposed by De Soto. The plan mentions:

In urban and peri-urban areas the government should preferably not transfer land in freehold to occupants, rather choose leases as the instrument for granting tenure for publicly-owned land and especially local authority land.

[...] Basic leases should be used along with group tenure arrangements, whereby block is registered under a lease agreement to the group or a local authority.

The government's endorsement of formalisation policies through collective entitlement is without any doubt targeted at improving the living conditions of slum dwellers by facilitating legal recognition. For instance, in the Seventh FYP of Bangladesh, there are hints of recognising informal settlements through existing planning instruments. The plan describes how the spaces of the slum may be divided into blocks where the block boundaries would be included in the national land registry in order to ensure legitimacy. This strategy is of course shaped by the idea of providing security of tenure to the slum dwellers.

However, this concept is also based on the neoliberal economic model, where informality is not recognised but rather must be made formal in order to gain recognition. Property in this model is strictly understood as a 'thing/object' purely to do with ownership and market exchange. This model ignores the diverse property rights, other than ownership, that the slum dwellers are already accessing, such as use, access, and benefit. Despite these other kinds of rights playing a far more significant role, as we have seen in the case of Kalyanpur slum, this model only emphasises ownership-based property rights. Scholars have argued that focusing on ownership through formalisation could actually lead to displacement and gentrification by commodifying other use rights. Formalisation is therefore seen by scholars such as Harvey (2003) as a form of enclosure and dispossession. To Porter (2011), formalisation is a tool to standardise 'informality', clean up the disorder, and codify 'messiness'. Collective ownership, creating new zoning instruments, and legalising street vending through permit systems are only some of the popular formalisation policies, all of which are clearly progressive yet at the same time are cast in a dichotomy that makes formalisation the only promising option while ignoring fundamental structures of power. Instead of recognising the commons (i.e., Kalyanpur slum)

as a form of property relations, such formalisation is likely to end up restructuring the property relations for accumulation and control by the state or the market.

Moreover, I have argued earlier that Kalyanpur slum is a socio-spatial construct. In that, I have highlighted the process of commoning rather than conceptualising the slum as an object or thing. What it means in terms of property relations is that the commons, as a social process of mutual construction between the commons and the commoners, erodes the distinction between the legal subject/titleholder and the object of the entitlement. Therefore, a commons perspective to informal settlements offers the premise for transformative practices that are needed to reimagine urban informal settlements beyond the existing legal/extra-legal dilemma, as reflected in various conceptualisations and policy recommendations.

6.4 Opportunities to support commoning in Kalyanpur slum

There has been a growing call from contemporary development practitioners and scholars for a change of attitude towards urban informal settlements (I. Ahmed, 2016; Swapan et al., 2017; UN-HABITAT, 2016a). As a result of various policy advocacy initiatives by local, national, and international actors, the discussion around informal settlements has started to shift significantly. One such shift can be noticed in the Bangladeshi government's Seventh FYP (2016–2020). Heavily informed by the SDGs and targets, the plan itself recognises the need for changing attitudes:

In view of the sustainable development goal to ensure environmental sustainability by achieving significant improvement in lives of the slum/squatter dwellers by 2030, there is a need to change attitude towards slum settlements. (Planning Commission, 2015, p-489)

The plan has explicitly emphasised the recognition of slum settlements as an integral part of the cities and the need for creating an enabling environment for the slum dwellers to perform their livelihood activities. The plan further says:

It should be recognized that slums/squatters are an integral part of urban areas and contribute significantly to their economy both through their labour market contributions and informal production activities. An approach based on positive attitude and seeking to improve the lives of the slum/squatter dwellers through slum

upgrading/improvement should be pursued to meet the sustainable development goal. (Ibid.)

The government's intention of bringing about a change in attitude towards informal settlements is also reflected through its focus not only on access to housing but also on access to land. Particular attention has been paid to the security of tenure in the current FYP, something that was missing in the previous one. The current plan recognizes the failure of the formal housing market and identifies the slum as an informal process for ensuring the housing needs of the 'urban poor'. The plan acknowledges that:

Due to the inability of the formal system to supply housing to the growing number of urban poor population, the informal sector has largely taken over the process of supply. Its contribution to the total supply is about 60% mainly in the form of self-built houses. (Planning Commission, 2015, p-477)

The recognition of the slum settlement in this plan as a form of 'self-help' is important considering the prevalence of an attitude of 'blaming the poor' in the public and policy discourse and ignoring the contributions made by the slum dwellers. This acknowledges the agency of slum dwellers arising out of the failure of both the public and private sectors in the cities of Bangladesh to provide a fundamental urban service, that of affordable housing.

The change in the government's attitude is certainly appreciable and has the potential to significantly improve the living conditions of the slum dwellers. The slum being recognized as a form of 'self-help' and the livelihood functions of the slum dwellers as 'significant' in the national policy document is indeed a major shift in the government's attitude in favour of the slum dwellers. The study of Kalyanpur slum suggests that the slum is a self-organized space. It is not just a manifestation of access to housing problem but a dynamic place that ensures the wellbeing of the slum dwellers on various levels.

However, the extent to which such change in attitude will be reflected on the ground largely depends on the interface between planning practices and informal settlements (Arefin, 2019; Hoque, 2012). At the end of the day, the local authorities are responsible to give effect to this policy. The Seventh FYP explicitly assigns responsibilities to these authorities such as RAJUK, City Corporations, National Housing Authorities, and HBRI within their existing frameworks to implement the slum improvement programmes (Planning Commission, 2015, p-489). But the questions remain on the capabilities of these authorities to make a real difference on the

ground given the very little attention being paid to the grassroots voices in the planning and designing process (S. Roy et al., 2018). Without the participation of the community in the planning and designing of interventions about informal settlements, it would be extremely challenging to bring actual benefit for the slum dwellers (Sowgat, Wang, & McWilliams, 2016). The predominant top-down approach to urban planning in Bangladesh today creates barriers to people-centric community planning. The long-term benefits of planning practices are barely realised due to the disjointed and uncoordinated approach to planning.

The incompatibility of the planning practices of the local authorities can effectively hamper the long-term sustainability of the commons. Within the commons discourse, particular focus has been made in recent time on strategies that transform commons from a short-term goal of reclaiming spaces in the city to a long-term process of sustaining a shared resource. Huron, (2015, 2018) identifies that within the urban context, following successful reclaiming of urban resources, there is a need for that resource to be maintained through long-term governance. In the case of Kalyanpur slum, the issue of sustainability remains a vital question, given the role played by local authorities such as the HBRI and RAJUK who were at the forefront of the eviction drives. It is extremely challenging for urban commons such as Kalyanpur slum to ensure its long-term sustainability while being intervened through a flawed conceptualisation of informality and a top-down planning framework.

It is undeniable that support, partnership, collaborations and consultations between slum dwellers and other actors such as urban planning professionals are crucial for the long-term sustainability of the commons. Especially, planning has to be more participatory and bottom-up in order for the commons to be sustained. Scholars have argued that the traditional ‘beneficiaries-service provider’ or ‘client-professional’ relationship between urban professionals and communities have to be replaced by a collaborative or supportive partnership between bottom-up and top-down actors (Miraftab, 2016; S. Roy et al., 2018). From a single universal governing body such as RAJUK towards liaison among a variety of stakeholders in the planning and designing of interventions. For planning to be successfully reflecting the changing attitude towards informal settlements, local knowledge, skills, and resources have to be combined with professional expertise. The intent from the side of the slum dwellers to develop such partnerships is quite visible. They provide enormous efforts to utilise the knowledge and support from various channels such as NGOs, civil society organisations, legal aid organisations, and human rights activists (for instance see M. Roy, Jahan, & Hulme, 2012).

However, examples of building partnerships between urban professionals such as planners, designers, architects, and the marginalised slum community are rare.

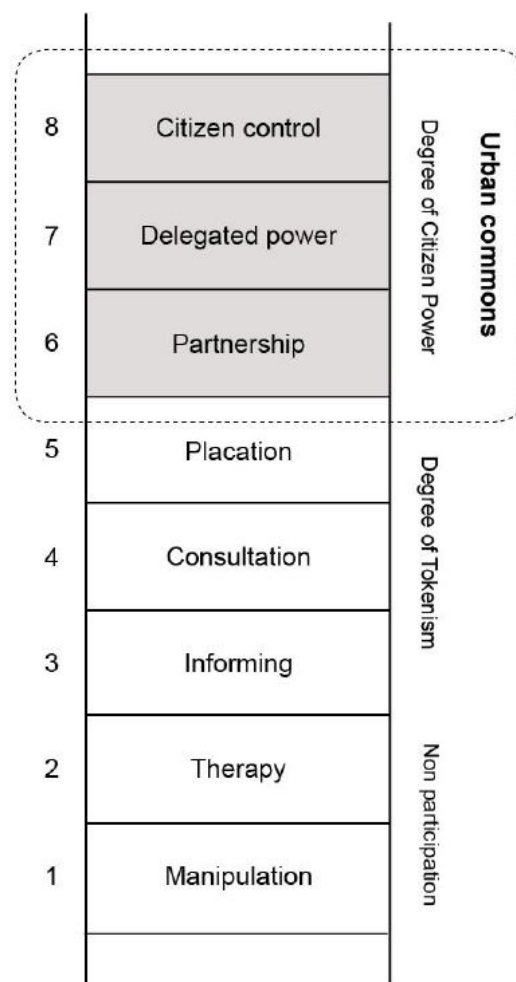
A commons understanding of informal settlements not only calls for collaboration between commoners and urban professionals but facilitates frameworks to enable such changes to happen. By enabling urban professionals to identify the barriers, a commons approach can reduce the friction between informality and planning. Urban professionals can, therefore, enable or support commoning practices by acknowledging commons as a form of property relations (Felstead et al., 2019; Porter, 2011). Urban commons such as Kalyanpur slum highlights the importance of social interaction and community cohesion, and individual as well as communal wellbeing and expression of self-identity. Planners need to pay attention towards the way community is formed, the way social dynamism is practised and the way spatiality is expressed in slums like complex settlements. Urban commons are not easily predetermined or cannot be readily designed. The mindset of the commoners needs to be understood by the urban professionals who could then play a significant role in recognising and validating the ideology that drives commoning. A facilitating role instead of a determinative role has to be played by urban professionals. By putting in place available services and frameworks, they can create the desired enabling environment for commons to thrive and sustain for the long term.

The partnership between commoners and the planners can be expressed using Arnstein's (1969) ladder of participation. The ladder presented in Figure 6.4 suggests that participation could be of various types. The top three positions in the ladder indicate a more supporting and facilitating role to be played by urban professionals when engaging with the community. A participatory approach to planning would ideally be positioned within the top three levels. Any position lower down the ladder would hinder the commoners' ability to maintain collective participation in devising, monitoring, sanctioning and resolving their own rules.

There is another key point necessary for the long-term sustainability of the commons. A commons need to be recognised by the wider society in which it operates. This recognition would ensure the desired security of tenure. The case of Kalyanpur slum suggests that tenure security is important to create an enabling environment for the commoning practices of slum dwellers. In absence of such recognition, the ability of the commoners to engage in commoning and therefore ensuring long-term sustainability of the commons is significantly hindered. Formalisation policies (i.e., land entitlement programmes) are often seen as capable of ensuring the tenure security of the slum dwellers.

However, a commons perspective on informal settlements suggests that policies such as formalisation, which are solely based on ownership, are inadequate in coping with the sheer heterogeneity present in informal settlements. The underlying conceptualization of property in these policies is purely based on ownership and transfer rights, ignoring other rights such as access, use, benefit, care, and responsibility. Payne et al. (2007) and Syagga (2011) have already discussed various examples where land entitlement programmes have failed to provide the desired results and rather have made these settlements vulnerable to market speculation.

Figure 6.4: Ladder of participation



Source: Adapted from Arnstein (1969)

Instead, inspiration may come from emerging examples such as Community Land Trust (CLT) models which have indicated to induce the most important of the benefits commonly associated with land titling, the security of tenure (Bunce, 2016; Crabtree, 2020; Thompson, 2015). Without necessarily ignoring the locally evolved property relation, CLT can ensure the legal recognition deemed crucial for the sustainability of commons like Kalyanpur slum. It is beyond the scope of this research to dive deeper into the concept of CLT practices, which could be found in the writings of Bezdek (2020), Bunce (2016), Davis (2010), Midheme & Moulaert (2013). However, some basic aspects of classic CLT practices are presented below-

- CLT is formed ideally with the vision to ensure the long-term shared benefit of the land. It holds land for housing with the purpose of ensuring land availability for generations.
- The land is placed under community control to meet the community use needs. The rules of access, use, responsibility, and care are established by the CLT governance bylaws.
- The governing rules of the CLT allocate housing units to eligible members with the governing right to the CLT (i.e., the right to establishing governing rules collectively). A CLT separates the collective rights of land from individual rights to the buildings on it.
- A CLT requires commitments from the members to sustain the commonly held land and the structures contained thereon. To ensure sustainability, A CLT often imposes restrictions on the resale of homes, however allowing for exits according to the prescribed terms for sustaining the CLT.
- The formal bylaws of the CLT governance connect the CLT with the wider community by building partnership among residents, non-residential neighbours, and supportive stakeholders (e.g., authorities). This partnership entails communication in a democratically controlled organization of co-equal trustees, which are not confined to the legal title holders of CLT residences.
- A CLT is distinctive from other existing dual property holding such as condominiums, co-operatives or mutual housing in its design purpose, governance theory and structure of community control to secure trans-generational benefits

Many of these aspects are similar to evolving examples of urban commons. Bezdek (2020) and Crabtree (2020) for instance have provided a detail analysis of the similarities between the classic CLT models and core values of the commons discourse. What has emerged from their

analysis is that a CLT is ideally similar to commons that offers an intermediate form of land governance between private and public. The notion of shared-governance and rules for long term sustainability of resource are what make CLT to be perceived as an urban commons. CLTs put into practice an alternative vision of what security of tenure can look like, unlike the formalization policy that centre ownership and transfer rights over the use rights. Bezdek (2020) argued that those practices of self-governance transform CLTs into a type of commons institution.

The commoners of Kalyanpur slum are already practising many of these aspects of a classic CLT. There are no governing bylaws exists for Kalyanpur slum, however, there are clearly established rules for managing access, benefit, use, care, and responsibility. The land is managed collectively while more private rights are exercised over the houses. Though the decision-making process are often influenced by the powerful local leaders, there exist platforms such as CBOs through which the regular slum dwellers can express their opinions. The commitment and efforts from the side of the slum dwellers are enormous to ensure the long-term sustainability of the slum. The establishment of the collective waste collection mechanism, the formation of various small cooperatives to overcome financial stress or putting voluntary efforts to manage the toilet premises indicates their commitments towards the slum.

However, before such a model could be applicable in the context of Kalyanpur slum, a critical analysis of CLT models are needed. Bezdek (2020) warned us that not all the CLT practices are necessarily commons. Some CLTs may function around the sole objective of access to housing, just like other affordable housing providers that deliver housing and shelter services. It is the self-organising character and agentive nature of the members to construct the CLT that distinguishes CLTs that function as a commons from CLTs that function as a housing service provider. Moreover, the examples of successful CLTs are mostly from the Global North whereas this concept has yet to be taken seriously in Global South countries such as Bangladesh. Therefore, more research would be needed to understand how such a model could work in a different context. For instance, the complex owner-tenant pattern in Kalyanpur slum would make it difficult to establish individual rights to the houses. These complexities need to be resolved democratically before a CLT model could be applied in the case of Kalyanpur slum.

6.5 Conclusion

In this chapter, I have explored the key observations from the case study of Kalyanpur slum that help us to enrich our existing conceptualization of informal settlements and therefore contributes in answering research question three. Drawing on the findings of the exploration of Kalyanpur slum from a commoning perspective, this chapter has emphasised the ways in which Kalyanpur slum exhibits a dynamic character and how this dynamism cannot be captured by a purely housing- and shelter-based understanding of informal settlements. Instead, this chapter has argued that a commons perspective can deepen our understanding of informal settlements by focusing on the process that facilitates the transformation of informal settlements into a self-organised being. The careful efforts that are made by Kalyanpur slum dwellers to organise the limited space around their performance of various daily activities put forward a strong argument for understanding the slum as a process rather than a problematic object. The spatial organisation of the commoning activities in Kalyanpur slum indicates the integral constitutive process between the commons and the commoners. This is a very different view of informal settlements that is based on their locally-rooted heterogeneity and complexity.

This chapter further highlighted the limitations of liberal economic understanding of property where property is all about ownership. By exploring the commoning practices, I have foregrounded the importance of other important practices in Kalyanpur slum such as access, use, benefit, care, and responsibilities. I have also portrayed the incompatibility of formalisation policies, such as land entitlement which are derived from the liberal economic understanding of property. The underlying concept behind such policy recommendations is to classify informal settlements according to the categories of legal or extra-legal, which in itself is problematic. In case of Kalyanpur slum, such simple categorisation would imply that urban informality is not only the domain of the ‘urban poor’ but also that of ‘non-poor’ others who exercise various illegal means to enclose this commons. Formalisation policies implemented in various countries around the world, however, have yielded little success. Many scholars have argued that in the absence of an effort to recognise embedded informality, such policies can hardly make any difference in providing tenure security to the slum dwellers.

This chapter has also highlighted the opportunities within the existing policy framework to bring positive changes in our approach to urban informal settlements. By referring to the Seventh Five Year Plan of Bangladesh Government, I have indicated the urge to changing attitude towards the slum community. However, I have also highlighted that such changes

could only be materialised if the planning practices in Bangladesh adopt more bottom-up approach and urban professionals take more of a facilitating role rather than a deterministic role. The commons perspective, as argued in this chapter, provides new insights into informal settlements and emancipate planning practices by widening their conceptualisation of property relations. The case of Kalyanpur slum suggests the importance of recognising the self-organising character of informal settlements in the planning and designing interventions. Recognising the slum as a commons, as an alternative form of property arrangement can potentially bring about the benefits that until now have been assumed as only possible through land entitlement programmes. I have also briefly discussed the potential of CLT models that can offer the recognition needed for the long-term sustainability of slums like Kalyanpur. Such recognition can create the enabling environment needed for slum dwellers to sustain their commons without risking it being absorbed by neoliberal market forces.

The overall analysis and discussion in this chapter suggest that the complexity associated with informal settlements cannot be grasped through a linear and simplistic analytical frame. Instead, we can see that a commons perspective allows for the critical examination of the hegemonic discursive notion of slum and highlights the actual on-the-ground heterogeneity and complexity exhibited in Kalyanpur slum. This slum, when seen from a commons framework, goes far beyond what is being said in the predominant narratives and framing of slum-like settlements. A commons perspective to the slum provides new insights and new tools for investigating the dynamism of informal settlements. Kalyanpur slum as a commons highlights the dependency and interconnectedness of the commoning activities that are fundamental to the constitution of the commons by holding the space of the slum together. Therefore, this chapter has mainly argued that seeing Kalyanpur slum as a commons help us to re-examine the static and homogeneous image of urban informal settlements. It can enable us to notice and take account of the fluid, dynamic, and heterogenic characteristics of urban commons that are constituted by the social organisation of the slum dwellers. This merging of commons thinking with the discussions of informal settlements not only facilitates the emergence of new perspectives towards informal settlements but also enriches theoretical discussions of urban commons. In the following chapter, I will conclude by referring to these insights, highlighting the theoretical and methodological contribution that this research has made in the scholarly debate of urban commons and informal settlements.

Chapter 7 : Contributions to the field and implications of the research

7.1 Introduction

This research has contributed to the discussions of understanding urban informal settlements. The main objective of this research has been to critically examine our existing understanding of informal settlements which are shaped by various negative terms. By highlighting the agency of the slum dwellers, this research has foregrounded the inadequacy of conceptualising slums from a purely materialist and narrow legal point of view. The adaptation of a commons perspective in this research has enabled us to portray the complex social and spatial dimensions associated with slum-like settlements. This research has presented a critical examination of the collective and individual activities that shape the space of an informal settlement in Dhaka, Bangladesh.

The analysis and discussions presented in this research have made theoretical and methodological contributions both in the field of informal settlements and in the field of urban commons. In the discussion of urban informal settlements, this research has contributed by offering a locally grounded approach of understanding slums as a ‘self-organised’ being rather than a ‘problematic object’ of urban. This research has highlighted the importance of understanding slums going beyond the language of ‘dysfunction’, ‘disorder’ and ‘illegal’. On the other hand, this research has contributed to the discussion of commons by highlighting the complexities associated with an urban commons such as slums compared to other types of commons. The traditional Common Pool Resource (CPR) concept is not the most helpful way to theorise commons like Kalyanpur slum. Kalyanpur slum is distinct from other kinds of commons in the ways in which the socialities and spatialities of this commons are materialised.

These contributions have implications for not only reimagining urban informal settlements but also for the kind of approach we adopt to intervene in them. There are policy level implications as well as implications for urban professionals, activists, NGOs and civil society organisations. These implications will be discussed later in this chapter. What follows after this brief introduction is the summary of the research questions, a discussion of the theoretical and methodological contributions made by this research, and, finally, the implication of the

research findings for various stakeholders. I finish by highlighting my own reflections on how to move forwards from here and the potential for future research in this area.

7.2 Answering the research questions

Under the broader objective of reimagining urban informal settlements, there are three specific questions that this research has answered. The first question that this research asked is: What type of space is Kalyanpur slum? Or what is Kalyanpur slum? This question has been asked in the context of a predominant ‘negative’ understanding of informal settlements in the literature and policy discourse, which has been presented in chapter one.

This research adopted a commons approach to answer the first research question. A detailed discussion of the commons approach has been provided in chapter two, where I discussed the ways in which a commons approach can provide a practical framework to revisit our existing understanding of informal settlements. In chapter four, I specifically answered research question one by looking at the ways in which the key five aspects of commons (i.e., access, use, benefit, care and, responsibilities) are negotiated by the slum dwellers. I argued that Kalyanpur slum is a commons which is under continuous threat of being enclosed. By enclosing these 13 acres of land, the authorities want to narrow and restrict these five aspects of commons. However, that has been challenged by a group of heterogeneous people who share a common vision of the slum. It is the day-to-day activities as well as the one-off collective mobilisations during emergencies through which these commoners transform the space of Kalyanpur slum into a commons.

The second research question aimed at describing the social and spatial characteristics of this commons. These characteristics have been explored in chapter four and five respectively. The social characteristics of Kalyanpur slum have been highlighted by exploring the process through which the access to the slum is widened, benefits of the slum are shared, uses of the slum are diversified, and care and responsibilities about the slum are assumed by various groups. Among the spatial characteristics of Kalyanpur slum, an important one is the heterogeneity of space. Kalyanpur slum exhibits the dynamic nature of its space where the paths, the alleyways and the public spaces are full of activities. While performing these activities, the slum dwellers change the spatial configuration of their commons. This change doesn’t occur haphazardly, but follows a spatial logic that makes their commons more connected and integrated. These integrated spaces are used by the slum dwellers strategically by combining various realms of life. These spatial characteristics highlight the heterogeneity

of the space in Kalyanpur slum; heterogeneity that brings all the buzz that makes slums a unique spatial setting.

The third research question was how thinking of Kalyanpur slum as a commons help us to enrich our existing conceptualization of informal settlements. This question has been answered in chapter six where I challenged two major presumptions about urban informal settlements. The housing and shelter based understanding of informal settlements has been challenged by arguing that slums are more than a collection of 'poor housing'. Kalyanpur slum not only has residential functions but combines a whole range of other function to ensure individual and communal wellbeing. The spatiality of the commoning activities suggested that the most integrated spaces of the slum are enacted by combining various income and non-income earning activities. Slums evolve as dynamic places by accommodating diverse activities rather than spatially separating residential function from other functions.

The analysis presented in this research also challenges the idea that slums are the isolated part of the city, without meaningful connection with the rest of the city. Kalyanpur slum tells us that not only it is physically located at the very core of urban Dhaka, but also functionally connected with various parts of Dhaka. The spatial footprint of the slum dwellers goes well beyond the jurisdiction of the slum. The highly integrated spaces of the slums are marked with the buzz of activities and flow of people from in and outside of the slum.

Another predominant tendency in policy discourse is labelling informal settlements as an illegal or extra-legal settlement which has been challenged in this research. Informal settlements are most often developed on lands that are owned by the state or private individual/corporation and therefore are considered illegal settlements as these settlements lack legal ownership or recognitions from the authorities. However, by exploring the commons literature this study has highlighted that commons is a form of property arrangement beyond the public versus private distinction. Commons is a kind of property arrangement where the notion of property is not all about owning but through how the matter of access, use, benefits, care, and responsibilities are negotiated. The case of Kalyanpur slum is an example of such a property arrangement where without the ownership of these 13 acres land, the slum dwellers are continuously commoning this property by widening the access and benefits, sharing and diversifying the use and also assuming the care and responsibility of the slum. The nominal binary categorisation of legal versus illegal is not helpful when it comes to intervene in urban informal settlements, as such categorisation intensifies the marginalisation and inequalities in

slums. Rather, recognising commons as a form of property arrangement can create an enabling environment in which the slum can thrive.

While answering these research questions, this thesis has also contributed to the emerging theoretical discussion of commons, as outlined below.

7.3 Urban slum commons and urban slum commoners: Theoretical contributions of this research

The first theoretical contribution of this research is in the possibilities of commons in the city. By theorising slums as a commons that are formed with the socio-economic and political pressures of urban, my research has contributed to the literature where commons are often seen in contradiction with city. As discussed in chapter two, cities are understood to be formed out of concentrated surplus capital and the labour of people who have been kicked out of their commons, historically through various acts of enclosure. In this framing, it is quite difficult to see how commons could be formed in cities that are marked with competition, individualism, and accumulation of capital.

The study of Kalyanpur slum suggests that the city can also bring commoners close to each other in a way that provides opportunities to create a new form of commons, even at the very heart of neoliberal development. Being located at the centre of a high-pressure neoliberal city like of Dhaka, Kalyanpur slum as a commons is never complete, but always in the process of becoming. By navigating through a range of opportunities and struggles offered by the urban environment, the slum dwellers transform the space of Kalyanpur slum on a regular basis. Therefore, along with the commoning possibilities that are created by the city, the space of the commons is also marked with enormous challenges, conflict, and contradictions. These contradictions never allow the commons to be complete but transforms into a process of becoming. Thinking of commons as a process overcomes the contradictions that seem to be inherent between the commons and the city.

Thinking of Kalyanpur slum emerging through the process of commoning also distinguishes Kalyanpur slum from natural resource commons or Common Pool Resources (CPR). This distinction contributes to another dilemma in commons research where scholars such as Foster (2011) has attempted to theorise urban commons as similar to natural resource commons. What Foster has argued is that urban commons are also a mere problem of the management of resources that are subtractable and nonexcludable. However, we see from the case study of

Kalyanpur slum that this commons does not possess a subtractable and nonexcludable character completely but only at various degrees. Kalyanpur slum is benefited in various ways in which people balance the access to the slum between narrow to wide open. More importantly, Kalyanpur slum put forward an idea of urban commons that is not a pre-given land resource waiting to be consumed but is socially constructed and constituted through commoning. It emerges as a kind of commons that is always in flux where the members are putting various efforts to sustain this common in the face of eviction and fire threat. Such findings confirms and extends the arguments put forward by Markus Kip (2015), Martin Kornberger & Christian Borch (2015) and Brigitte Kratzwald (2015) that a straight translation of natural resource commons into urban commons is inadequate.

We also see from Kalyanpur slum that this slum is formed by the migrants from various parts of the country. As Harvey (2003) theorises, the rapid migration to cities results from what he calls “accumulation by dispossession”, a process which forces people to leave their traditional commons (e.g. land, waterbody, forest) behind to search for work in the cities. However what we see from Kalyanpur slum is that people *did* come to Dhaka to search for work *but at the same time they have come together to form the means of their subsistence*; the commons. The slum dwellers create various jobs and opportunities in and around their settlements that absorb the surplus labour of their own community. The commons they constitute not only supports their diverse livelihoods, but also contributes to the making of the city (e.g. cheap labour, waste picking). Such insight aligns with Alam and Houston's (2020) findings where they highlighted a group of vulnerable migrant communities in Bangladesh who are typically left out of the institutional care, but were able to engage in caring for others and were able to secure care for themselves in that process. In the case of Kalyanpur, though the initial move to the slum is driven by the need for affordable housing, the commons that are being created in that process offer more than just housing. Therefore informal settlements as commons are not just a source of wealth for consumption but also emerge as the means of ‘producing and distributing such wealth’; similar to the argument made by Hardt and Negri (2009) regarding urban commons. This is a unique characteristic of informal settlements, which differentiates them from traditional natural resource commons.

Exploring the commoning practices in Kalyanpur slum also indicates that these commoning practices are pragmatic. Commoning in Kalyanpur slum is the result of the pragmatic choice of a group of sometimes desperate people who have limited options. Commoning is a pragmatic

choice because, for people whose access to land/housing has been denied, the slum provides both materialistic and non-materialistic means for subsistence. For those who have not been recognised by their own community, the slum offers an emancipatory way of expressing themselves, even if that takes breaking the conventional way of doing things. For those whose dreams have been seized by natural calamities, the slum brings new hope and chances to redeem. It is therefore out of necessity that the slum exists as a common despite all the existing pressure from the city to turn/burn it down to the ground on a regular basis.

Thinking of commoning as a pragmatic choice is very different from thinking of commoning as a political act. There is a tendency in commons thinking to romanticise urban commoning as a sort of political “value practice” (De Angelis & Harvie, 2014). The underlying concept behind such theorisation is the argument that a human being is never purely ‘homo-economicus’ or acting purely based on economic rationality and the commons is presented as an example of this argument. For instance, Cattaneo and Martinez (2014) in their theorisation of squatting as a form of commoning, distinguished between politically motivated squatting and non-politically motivated (e.g., economic) squatting. Politically motivated squatting, as they state, is driven by the motive of living beyond the capitalist society and expressing this intent loudly through the act of squatting. Whereas non-political squatting, as they explain, is an act of a group of people who squat simply because they need housing and there is no other motivation behind such act than to remedy a desperate situation, secretly and in silence. Based on the distinction made between economic choice and political choice, Cattaneo and Martinez critiqued those who discuss political squatting only while leaving non-political squatting out of their analytical framework.

However, theorising Kalyanpur slum as a common suggests the separation between economic and non-economic (e.g. political) practice is a false dichotomy. Rather it is the combination of income-earning and non-income earning activities that make the slum a dynamic space. By making individual and collective pragmatic choices driven by the daily *socio-economic* needs, the slum dwellers are contributing towards the larger *political* context of commoning. As much as the political aspects such as control or access are important to the slum dwellers, the economic aspect such as affordability is also crucially important for them. In fact, most of the respondents expressed how expensive it would have been for them to live anywhere in Dhaka but the slum. Therefore, the slum dwellers choose this common out of their own economic “self-interest” in which the interest of the “self” is bound up in the interest of the “community”.

The slum is what makes the most economic sense for them as people trying to live decently in an expensive city. So, Kalyanpur slum exists as a commons out of the necessity enacted by the people, not necessarily out of a preconceived politics.

That is not to say that commoning is purely economic or not political. Of course, the very political nature of commoning in Kalyanpur slum is evident throughout the history of the slum. It is just to say that Kalyanpur slum as a commons should not be imbued with any sorts of romanticism, but rather should be conceptualised as the rational and pragmatic choice of a group of people with political implications. How I read the economic and political practices in Kalyanpur slum is as a progression from economic practices to political practices. The economic practices of the commoners lead them towards politically motivated practices such as demonstrations against the eviction drives or mobilization against the land grabbing by the powerful local elites. Both these practices are valuable for the subsistence of the commons as they supplement each other in a way that supports diverse livelihood of the commoners.

The learnings from Kalyanpur slum also shed lights on the sustainability of urban commons under the pressure of enclosure. Scholars such as Harvey (2011), Kip (2015) and Kratzwald (2015) have argued that the politics of commons is not only about how to manage a shared resource but how to sustain the commons for the long term. Contributing to this argument, Kalyanpur slum explains why urban commons are vulnerable to tragic ends, but not the kind of tragedy predicted by Hardin (1968) in his ‘tragedy of commons’. A close examination of the daily activities of the slum dwellers indicates that while Kalyanpur slum offers much to its residents, it also requires a lot from them to keep this common functioning. It takes a lot to collectively self-organise a slum commons with extensive involvement by various groups of people holding different power positions. Respondents such as Abdul feared that the slum may suffer in the near future because of the diminishing motivation of the people to get involved in the collective political struggle of the slum. It is quite possible that the slum might be demolished again by the authorities. This is a particular challenge associated with urban slum commons, where people often see themselves as powerless against the consolidated power of the authorities (e.g., HBRI, police), continuous fire threat, and news of slum demolition at other parts of the city.

Kalyanpur slum also demonstrates the efforts in place to avoid such tragedy. For instance, Abdul and other respondents have emphasised on the unity among the slum dwellers to collectively fighting such tragic end. Yes, there are people who are only influenced by self-

interest and personal gain such as the slum lords, but there are also slum commoners such as Borna, who voluntarily contribute by looking after the toilet complex, or Saiful who offers reciprocal help to others, or Shorna who teaches people how to write their signature. These people value collective survival and community benefits. Therefore, if Kalyanpur slum ends up with a tragedy, it would not be because of the self-interest of the people who overexploit their resource as Hardin predicted, but because of the vested interest of the powerful elites. So the real tragedy of the commons is when it is destroyed by powerful external interests, a particular challenge of urban commons.

Another important contribution of Kalyanpur slum research is in the dilemma between the commons and the state. Scholars such as Gidwani and Baviskar (2011) have seen commons at odds with the state, highlighting in their research the ways in which states operate to enclose and commodify commons. Such an assertion has influenced Aligica (2014) to think of commons as an alternative to state or the public. Thinking of commons as a way of collective self-provisioning may look like a sensible argument in the urban context of the Global South such as in Dhaka where the capacity of ‘the public’ to ensure affordable housing is extremely limited. It is true that thinking of Kalyanpur slum as a commons suggests that commoning can be scaled up to influence the workings of a metropolis – able to tackle questions of housing, employment, waste management and so on. However, we have to be careful before making such an assertion that may potentially send the message to the state that the ‘state isn’t necessary’. Similar to Mcshane (2010), I see such an assertion as potentially increasing the gap between the commons and the state and consequently intensifying the tension.

Instead, what we see from the case study of Kalyanpur slum is the potentials of commons to *support* ‘the state’ by self-provisioning rather than letting the state ‘off the hook’. Where commons can take pressure off the state by collective self-provisioning, the state can also ensure the long-term sustainability of the commons. For instance, the NGO bureau approval by Bangladesh government allowing NGOs to work in the slum indicates that state and commons can work side by side. The state, in fact, can actually work as an enabling agent for the commons as the electricity service, for example, provided by the government made it possible for the slum to function until late in the night. A systematic analysis of the enabling role that the legal structure of state can play to support commoning can be found in the work done by Dombroski, Diprose, & Boles (2019) and Morgan & Kuch (2020). Their analysis confirms this view that commons can operate from within the legal structure of state. I have

also discussed briefly in this research the potentials of Community Land Trust (CLT) approach to endorse legal recognition of Kalyanpur slum. Therefore, the seeming contradiction between ‘the state’ and ‘the common’ appears less relevant in the context of urban informal settlements and indicates that we do not necessarily have to choose between the commons and the state. Such a finding acknowledges the role of the state in the functioning of the commons, and supports the argument made by Kratzwald (2015) that the idea of commons can be used to push the idea of the ‘public’ in a more democratic direction.

Last but not the least, an important contribution that this research has made is in the notion of boundary in commons discourse. Institutional scholars considered that a common will have a fixed and easily identifiable boundary. Most of the natural resources such as forests or hinterlands as theorised by institutionalist scholars have a fixed and clearly identifiable boundary. For alterglobalisationists the notion of boundary is broader and not necessarily fixed. Therefore, the alterglobalisationists have often theorised the whole city as a commons or the whole planet as a commons. The case of Kalyanpur slum suggests that the notion of a static or an open boundary is not helpful to explore the dynamism exhibited in this commons. The commoning activities performed within the slum do not necessarily have any impact on the overall physical boundary of the slum. By performing various commoning activities, the commoners have changed the inner spatial configuration of the slum without necessarily changing the boundary of the 13 acres of land. The spatial dynamics of Kalyanpur slum shaped by the commoning practices cannot be captured as long as the spatial focus of commons remains on the notion of a static physical boundary. Therefore, studying the spatial configuration of a commons like informal settlement makes more sense as the commoning activities are directly linked with the spatial configuration of the commons. This study has shown that the spatial configuration (i.e., connectivity, integration, intelligibility, and synergy as defined in space syntax) has been changed over the last 17 years by various acts of commoning and enclosure, while the physical boundary remained the same. This finding suggested that both commoning and enclosure have spatial consequences which are materialised through the change in spatial configuration, especially in the context of urban informal settlement.

This link between the commoning practices and the spatial configuration has led us to argue that commoning is not uniformly practised across the commons. Instead, commoning activities are directly linked with the way space is organised. The highly integrated spaces in the slum

correspond to more collective activities compared to the less integrated spaces. These integrated spaces form the lifeline of the slum being the major activity hub. In order to maximise the benefits out of these spaces, they apply various technique such as splitting the rental space among various business or dividing the operating hour among themselves to accommodate multiple functions of the space. The correspondence between the spatial configuration and commoning practices have also revealed the location of dispute within the commons. Though the whole common is under dispute between the commoners and the HBRI, this conflict is nowhere more visible than at the Bell-Tola open field. Despite Bell-Tola configurationally being a space of opportunity, the ongoing construction activities of HBRI and continuous police patrolling have turned this field into a space of struggle for the commoners. However, there exists continuous effort from the commoners to claim their rights to this space by exercising either individual interest such as building new houses or sometimes collective interest, such as choosing this location for the demonstration against fire and eviction.

Studying the spatial configuration suggests that commons and enclosures should not be treated as binary fixed typologies of space as many scholars had imagined them, such as Blomley (2008) and Lee & Webster (2006). Rather they exist on spectrum in constant states of transformation that have both social and spatial consequences. Commons space become enclosed through the act of exclusion (e.g. Bell-Tola field) and conversely commons space can be reclaimed from enclosure through the act of commoning (e.g. re-building the slum after demolition, expansion of section eight). This act of commoning is what Gibson-Graham, Cameron, & Healy (2016) have called the performative politics of every day. This politics involves recognizing a space as shared, by expanding participation in the making of the space, and establishing collective responsibilities for its care and governance, quite evident in Kalyanpur slum. Such a theorisation contributes to the overarching argument put forward by Harvey (2012) that there are no spaces that belong to the commons unless society actively insists that they be. Similarly, borders, gated communities and segregated cities do not come into being, except by design.

These contributions indicate that informal settlements are critical in our broader theorisation of urban commons. This is because it is a necessary element of survival in a way that many other urban commons such as garden, public space or urban street may not be. Kalyanpur slum is a commons born out of necessity, not as an experimental or optional project. Slum-dwellers just

cannot quit this common even if it takes much from them to keep the common going. They keep this common because their lives depend on it. This is not to say that other types of commons are not important, but to emphasise the role of slums in the lives of millions worldwide to provide basic subsistence for living. Therefore, Kalyanpur slum, as a commons, provides a particularly a good example through which both the benefits and the challenges of the urban commons can be understood.

7.4 Methods for spatial and social investigation: Methodological contribution of this research

Apart from the theoretical contributions summarised above, this research has also contributed methodologically in the analysis of commons. This research has particularly combined the spatialities of commons with the socialities in order to develop a comprehensive understanding of urban informal settlements. In doing so, this research has supplemented the commons identi-kit proposed by Gibson-Graham, Cameron and Healy (2013) with the Space-syntax approach and vice versa. Traditionally the socialities and spatialities of commons are dealt with separately, despite knowing that they are intertwined with each other. While the socialities of commons have been paid detail attention in the literature, the discussion of spatialities has remained constrained within the discussion of boundary or just simply mapping the commons as points over the space. This is in large part because of the lack of available tools that can study the micro-level spatial dynamics. However, adopting a Space-syntax approach has enabled me to 'zoom in' inside the commons and capture the micro-dynamic characteristics of the commons. Combining the commons analysis derived from Gibson-Graham's identi-kit with the analysis of a spatial configuration of commons through Space-syntax has illustrated the heterogeneity of space in Kalyanpur slum. This integration has enabled us to visually comprehend the commoning activities and their spatial manifestation.

One implication of this integration of methods can be observed in the way that the contestation over space has been identified spatially (i.e. Bell-Tola field). The axial map produced from the space-space topology of the slum has first been tested to see if the model corresponds with the GPS tracked data and field observation. Once the Pearson correlation coefficient (r) confirmed that the axial map corresponded with the field observation in terms of identifying integrated spaces, then the model has been used to identify the place of contestation. Based on the overall correspondence between the axial model and collected data, the space of contestation became clearly visible where such correspondence were not established. I found such an iterative

approach helpful in analysing the inner micro-spatial boundaries of opportunities and struggles. I see this as a methodological contribution to the study of commons that researchers can build on for other kinds of case studies.

Integrating Space-syntax with commons analysis contrasts with the argument that quantitative tools are not well equipped to comply with critical social knowledge production (cf. Harvey 1972; Gregory 1978; Rose 1993; Dewsbury et al. 2002). Spatial analysis has often been separated from critical social analysis by arguing that these techniques have been and still are used to sustain and justify reactionary and politically conservative interests and initiatives. However, the socio-spatial approach adopted in this research suggests that such an allegation of the incompatibility of quantitative tools such as Space-syntax or GIS with the spirit of critical social research is not quite true, similar to the argument made by other scholars such as Kwan (2004), Pavlovskaya (2009, 2018) and Sheppard (2001). Instead, the analysis of the inner spatial configuration of the commons has contributed to challenging the hegemonic and singular notion of space in Kalyanpur slum. Therefore, by combining the GPS tracked data and Space-syntax approach with commons analysis, I argue in this research that a mixed-method approach can be useful in conceptualizing the critical theories of urban commons.

Another point to note from such integration is the importance of qualitative information to make sense of spatial configuration deriving from Space-syntax approach. Though the scholars of Space-syntax (e.g., B Hillier et al., 1993; Bill Hillier, 2008; Bill Hillier & Vaughan, 2007; Vaughan, 2007) have argued that the findings from such analysis should be validated by ground-level evidence, there are many examples where quantitative measures such as integration have been calculated and presented without support of qualitative evidence (e.g., B. Ahmed, Hasan, & Maniruzzaman, 2014; Dawson, 2003; Jiang & Liu, 2009; Zhang, Zhuang, & Dai, 2012). The evidence from Kalyanpur slum, however, suggests that integration values when combined with the field observations, interviews, and GPS tracked data, reveal more information about space rather than simply presenting them by their own. What this means methodologically is the value of integrating social and spatial as well as qualitative and quantitative in order to capture the sheer diversity and complexity associated with urban informal settlements.

7.5 Implications of this research:

The main implication of this research is in the course of questioning our predominant understanding of urban informal settlements and bringing a commons perspective to reimagine our conceptualisation of them. The ways in which our predominated understanding of slums are materialised on the ground is mainly through our policy and planning framework as well as through the active engagement of the scholars, activists and civil society organisations. Therefore, I would highlight some of the implications of this research in these two broader areas.

In order to develop an inclusive policy and planning framework for urban informal settlements, there are some points that we can note from the experience of Kalyanpur slum. First of all, we need to restrain ourselves from framing informal settlements in the way Mike Davis (2006) has done; as ‘the problem’ of our contemporary urban. Instead, these settlements should be seen as active agents in partnership with our efforts to improve the quality of urban life. The current number of people living in informal settlements worldwide is projected to increase from one billion to two billions by 2030 (UN-HABITAT, 2016c). Most of this increase is going to take place in the cities of the Global South. There is no reason for us to think that the destructive, denialist or ignorant approach towards informality, which have dominated our urban strategy for last 50 years (Gilbert, 2007; Mohit, 2012), are going to bring any positive outcome to the complex urban landscape of the cities of the Global South. We need to accept informal settlements as the social and spatial reality of 21st century urban landscape, and our urban strategy should adapt accordingly, but in a different way than how Western modernity has imagined (Robinson, 2011; A. Roy, 2005). We need to comprehend that beyond the material deficiency, slums are also sites for economic innovation and urban adaptation, as we have seen in this study of Kalyanpur slum. To bring real improvement to the lives of the slum dwellers, our urban policy has to first confront the most dominant depiction of slum as poor, dysfunctional and shameful element of urban.

In context of Bangladesh and elsewhere, urban informal settlements are dealt under the broader policy framework of urban poverty. Informality and poverty are considered synonymous to each other in light to the argument that informality prevents developing a ‘real’ economy (see Bird, Li, Rahman, Rama, & Venables, 2018; Rana, 2011). Positioning informal settlements by default under the domain of urban poverty leads to negative images of slums as ‘poverty pocket’, ‘dysfunctional space’, or ‘poor residential units’ (Farrell, 2004; Gilbert, 2007; Nijman,

2010). Such positioning often hinders us from considering informality as the part of urban system and therefore omitting them from the collective representation for what is 'urban' (A. Roy, 2011; Volait & Nasr, 2003). Thus fighting against poverty becomes a struggle against the most visible form of informality; the slums. Jones, (2012) has elaborately described how such neo-liberal economic consideration has been institutionalised in national policies across the Global South since past 50 years.

I see an important step towards an inclusive urban policy as this: to treat urban informal settlement separately from urban poverty. Roy (2009) reminds us that we should not confuse informality with poverty. Scholars such as Bolay, Chenal, & Pedrazzini (2016) have argued that eliminating slums cannot be equivalent to eradicating poverty. Poverty is a broader issue related to the distribution of wealth, irrespective to the way informality functions in cities like Dhaka. Poverty is a challenge for most of the neighbourhoods in Dhaka to various extents and its concentration is high in informal settlements. However targeting slums to address poverty is like dealing with the symptoms rather than the root cause. Popular slum intervention programmes such as the rehabilitation, resettlements, Back to Village and so on with their limited rate of success have only managed to geographically shift the symptom from the core to the periphery (Mohit, 2012; S. Roy et al., 2018). The number of informal settlements in and around Dhaka and in the major cities of Bangladesh continues to grow at a faster rate (I. Ahmed, 2016). Instead we need to find a way to learn from informal settlements and design our policy accordingly (Alam & Miller, 2019; Banks, Lombard, & Mitlin, 2019). Our policy intervention should focus on the agency of the slum dwellers from the way they create and maintain their means of subsistence. Such a change in policy focus may require a new lens to see informality, new tools to analyse them and new approaches to deal with them. I argue that commons thinking enables to facilitate such change in focus.

What does a policy targeting informal settlements separate from poverty reduction look like? Well, the findings of this research offers some hints in this direction. First of all, such policies have to be designed based on what is already practised by the slum dwellers on the ground. Slums should not be objectified as a 'thing' and should not be characterised in terms of its materialistic deficits. There is of course room for improving the infrastructures of the slums, through design and planning interventions, however such interventions would not bring any meaningful change unless we understand the constitutive process between the slum and the slum dwellers and find a way to support the self-organising characteristics of slums. A slum is

not a pre-given object, thing, or a resource waiting for its appropriators to consume, rather it is constituted through the daily activities of the commoners; an important insight that can inform the policy design of this era of urbanisation. Leaving these commoning practices out of the policy and planning framework would result in more failure examples such as Bhasantek and Mirpur rehabilitation projects.

Secondly, a policy that is capable of improving the living conditions of the slum dwellers would be very different than the current policy recommendations, such as the formalisation policy. Formalisation policy, as I argued in this research, is influenced by the neoliberal economic model where instead of recognising the 'informal', the idea is to convert informal into formal by various legislative instruments such as land entitlement. Ownership under the formalisation policy is considered key to ensuring tenure security and therefore group or individual ownership to land is given priority over other rights. It is assumed that ownership rights would automatically ensure other rights such as access, use, benefits, and so on and leverage the potential of property to bring the people living in slums out of poverty. However, the case of Kalyanpur suggested that the matter of ownership is not a straightforward process as the slum dwellers are not a homogenous group. Given the power dynamics between the owners and tenants in Kalyanpur slum, it would be extremely difficult to ensure the kind of benefit expected to be derived from such policy. Moreover, in line with the findings of Syagga (2011), I argue that such land entitlement programmes could potentially exploit the property relation currently exhibited in Kalyanpur slum and make the slum vulnerable to be absorbed by the property market.

Instead, a right kind of policy would be the one that creates an enabling environment by recognising commons and ensures the long-term sustainability of the commons. The one that acknowledges diverse property arrangements going beyond the neo-liberal binary of public and private. St. Martin (2020) has already discussed the diversity in property arrangements which offer a pressing case for us to acknowledge commons as a form of property arrangement. However a vital question remains in this regard: how can the practices of commons be integrated within the existing legal structure? Does our current legal structure well-equipped to acknowledge such practices without massive changes in the legal system. This a different but very important discussion which I hope future researchers on this area would undertake. However, I will mention here that Morgan & Kuch (2020) have already argued that we don't need to make revolutionary changes in our legal structures to acknowledge commons.

Dombroski et al. (2019) have discussed the potentials of commoning practices to be reflected in tweaks to the existing legal structure in their study commons in post-earthquake Christchurch.

An example of enacting commoning into the mainstream legal structure could be through the practice of Community Land Trust (CLT) models which I have discussed briefly in this thesis. A CLT model could effectively serve the purpose of ensuring tenure security of the slum, vital for its long-term sustainability. CLT possess the characteristics of commons and many of the key aspects of a CLT is already in practice at Kalyanpur slum. However, a more critical examination is needed before such concepts can be adopted in contexts such as Kalyanpur slum. Such an examination may take time and effort before delivering any tangible outcome, but I argue such an examination is worthwhile to undertake considering the ongoing injustice caused by our current understanding and policy approaches towards informal settlements.

Another important criteria of an effective policy towards urban informal settlements would be the ability of the planning practices to adopt more bottom-up approach. It is clearly necessary to revisit what we mean by urban planning, social participation, and participatory approach (Baker & Schuler, 2004). Despite the diverse skills and expertise that are brought together by urban professionals, there has been hardly any benefits realised by the slum dwellers when it comes to planning practices in the Global South cities. As I discussed earlier that there are some hints of changing the attitude towards informal settlements as reflected in the Seventh Five Year Plan (2016-2020) of Bangladesh. However, I have also highlighted that such policy change could hardly make any real difference on the ground unless the planning practices in Bangladesh find a way to reconcile their relations with informal settlements. Therefore an effective policy framework would enable planning practices to invest into innovative and creative solutions tailored into the local context rather than adopting 'importing' solutions.

In this context, I argue that commons thinking can enlighten planning practices and theories. Commons, with its inherent link to property, is extremely relevant in creating new avenues for planning practices and theories. Commons provides the opportunity for planning to emerge out of its colonial legacy and become more responsive to creating a just and equitable society. A commons such as Kalyanpur slum needs partnership with the wider stakeholders in order to be sustained. Urban professionals such as planners and urban designers can take a more participatory approach, where their role would be to facilitate community engagement in planning and design interventions rather than the traditional top-down approach. Though

commons thinking is missing from the mainstream planning discourse to a great extent, the kind of analysis I presented in this research could help planners to understand the kind of role that they can play in order to support commoning. My research has intended to bring commons and urban planning close to each other by theorising informal settlement, a key topic in contemporary planning from commons perspective.

Another implication of this research is in the way we engage ourselves with the slum community, whether as a researcher, NGO professional, activist or as urban professionals such as planners, architects or designers. We need to be aware of the fact that such engagement involves positioning ourselves both politically and spatially. As much as socio-political awareness such as our role and power dynamics in relation to the slum dwellers, spatial awareness such as the territoriality in which they operate is crucially important. We should not come into quick conclusion about these people and their places without paying in-depth attention. Such attention is difficult to sustain while on a quick visit and often requires one to spend a longer time within the community. We should leave behind our baggage as ‘experts’ and we must learn to view and navigate, to listen closely to the disparate and diverse voices. In order to understand the richness of the slum that welcomes us, we need to adopt an ‘ethnological’ look at the reality, to understand the unique way a slum has to exist. We need to pay close attention to the history, present and future ambition of the settlement. Only then our expert knowledge would be enriched by the understanding of the reality of slums, of the modes of operation, tensions, power struggles and the challenges.

Hence I conclude by saying that the case study presented in this thesis can work as an inspiration to facilitate the change in our predominant views on slums and to revisit our ‘models for making the city’. It provides some way forward to rethink our way of representing both the social and spatial elements of the slum. The implication of this research is in our changing attitude towards slums that the slum should no longer be seen as flag bearer of poverty. It should rather be seen as an integral part of the urban where a large proportion of urban dwellers find a way of living together. Commons thinking in Kalyanpur slum suggests that this way of living can disrupts our modernist vision of the urban and can also be a source of knowledge about understanding 21st century cities, especially in countries of the Global South, which are facing the challenges of resource depletion, climate change and poor urban governance.

7.6 Moving Forward

It was the last afternoon of my fieldwork. I thought to pay a visit to Mijan's tea stall for the last time. Mijan was busy as usual making teas and selling cookies, chips, and cigarettes to his customers. Seeing me in his stall, he seemed to be happy and welcomed me. He asked me about the progress of my work and when I am due to return to New Zealand. I informed him that my work was almost done here and I shall be returning to New Zealand soon. He paused his motion for a second and then thanked me for spending time in their slum.

It was really good to have you here brother. We are happy to see young people like you, who are concerned about us, who want to do something for us.

....I shall make a cup of tea for you; Mijan's special. Please don't insist to pay, it's on me.

I was once again happy to see the friendliness and hospitality of Mijan. This is something I have witnessed throughout the whole duration of my fieldwork. They may not be economically solvent, but they are big-hearted people. I spent quite a long time at Mijan's stall that afternoon, talking about his business, family, and the neighbourhood in general. I also asked him about his views on the future of this slum. What Mijan said kind of summarises the views of other respondents as well.

You may not find this place as it is now when you visit us next time. There are two possible scenarios that you may come across. You may find that I have grown my business by renovating this stall with more sitting arrangements and with more food items. Or you may find that this tea stall has been demolished and a multi-storeyed building has taken its place. I would hope for the earlier scenario though [with a laugh].

....Hope is our only strength. It is this hope that motivates me to open my stall every morning. Despite so much misery, we are hopeful for a better future here and this hope keeps us going. I don't know for how long we shall be able to survive like this, but I have faith in our judiciary system. Like the whole community, I am also very hopeful that the stay order will remain and the final verdict will come in our favour.

Mijan's statement indicates the aspiration of the commoners for a stable, secure, and prosperous living environment. Like Mijan, most of the slum dwellers are driven by this

aspiration that one day the slum would be accepted and recognised by the wider system within which they operate on a daily basis. There will be a time when they don't have to worry about the future of themselves and their next generation. This hope and aspiration is what fuels their commoning practices.

There are emerging examples of cases where commons have been recognised. It has been recognised as a form of property management beyond the market/state binary. An example is the Supreme Court of India's decision in 2011 regarding the management of a water body in the state of Punjab (Bollier, 2011; Marella, 2017). The local government, being the landowner, initiated the transfer of ownership of the land to a private company. The land included a large pond shared by the villagers for drinking water, washing, watering cattle, and other household purposes. The court not only condemned the land transfer as ignoring communal interests in the resource but also declared the need to protect common rights in order to defend the lives of the communities.

In the case of Kalyanpur slum, the legal dispute between the slum dwellers and the HBRI is still under the judicial process of the High Court, while the stay order remains in place. Like Mijan, I also hope for a remarkable judgement in favour of the slum dwellers that will provide legal recognition to their commons. But we don't know for sure if that is going to happen or for how long these people have to wait for their rights to be recognised. Time will tell in which direction the final judgement goes, or even the extent to which a verdict in favour of the slum dwellers would make a difference to the existing approach to slum improvements. Because the problem is with our mindset, in our very understanding of urban informalities. For as long as our mindsets are not changed and for as long as we don't push ourselves to free from colonial legacy, legal recognition can only change things on paper, but not on the ground.

While debate intensifies worldwide regarding what should be done for urban informal settlements, I strongly believe that commons thinking can offer fresh perspectives. By upholding the dynamic, heterogeneous, and locally grounded processes inherently associated with informal settlements, this new perspective exposes the predominant, static, and pervasive characterization of slums as 'poor' or 'illegal'. A commons lens offers us a new window not only to think about informal settlements ideologically but also to enact humanistic solutions practically.

I hope that moving forward, scholars and urban planners will continue to seek the potential of commons framework to understand informal settlements. I also hope that the spatial perspective of commons will be given importance in these explorations while paying close and clear-eyed attention to the details of everyday life. We have to be very careful while thinking, reading, writing, and talking about informal settlements because these processes can be the part of the discursive marginalisation. We have to be critical about the kind of image we like to produce about informal settlements through our scholarly writing. Informal settlements are becoming a new urban reality and there is no scope to think that they do not belong to the urban. With increased privatisation and neoliberal urban policy in place, some people will always find a way to gain some control over their collective lives. Urban commons will, therefore, continue to emerge no matter what challenges are posed on them. In this era of urbanisation, we need these urban commons. We need to find a way to recognise, understand and support these urban commons.

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Appendix: Basic demographic information of the respondents

Pseudonym	Section #	Age	Education	Major occupation	Ownership type	Household Size	Duration of living	Home District	Migration Type
Yasmin	3	28	Class five to Secondary school	Housekeeping, Poultry business	Tenant	4	31	Nilphamary	With contacts
Hasina Begum	1	60	No formal education	Recycling business	Owner	3	30	Bhola	With contacts
Rumana	3	39	Below class five	Housekeeping, Clothing Business	Tenant	5	25	Bhola	With contacts
Nazia	4	35	Class five to Secondary school	Tailoring business, Housekeeping	Tenant	4	19	Thakurgaon	With contacts
Shorna	4	38	Secondary school or above	NGO Job, Tuition	Owner	4	18	Narshingdi	Without contacts
Aleya	2	30	Below class five	Housekeeping	Tenant	5	26	Demra, Dhaka	Without contacts
Shetu	8	35	No formal education	Housekeeping, Grocery store	Owner	3	17	Bhola	With contacts
Jorina	8	30	Class five to Secondary school	Restaurant owner	Owner	4	30	Bhola	With contacts
Hashi	8	58	No formal education	Tea Stall owner, Housekeeping	Owner	3	30	Kishorganj	Without contacts
Rojina	4	35	No formal education	Grocery Store, Firewood Business	Tenant	6	18	Magura	Without contacts
Aklima	9	26	Class five to Secondary school	Clothing Business, Housekeeping	Tenant	6	12	Bhola	With contacts
Lipi	6	19	Class five to Secondary school	Garments Worker	Tenant	2	0.5	Noakhali	With contacts
Rohima	8	36	No formal education	Care giver, Cleaner, Housekeeping	Tenant	2	15	Bhola	With contacts
Halima	10	35	No formal education	House Keeping, Tailoring, Street vending	Tenant	6	6	Noakhali	Without contacts
Nilufer	7	59	Class five to Secondary school	Childcare operator	Owner	1	33	Barishal	With contacts

Borna	8	32	Class five to Secondary School	NGO worker, Tailoring	Owner	3	28	Gajipur	Without contacts
Manna	5	21	Secondary school or above	NGO Job, Student, Tuition	Tenant	7	21	Demra, Dhaka	Without contacts
Asad	2	35	No formal education	Mason, Driver, Sanitary work, General labour, Shop keeper	Tenant	3	32	Nilphamary	With contacts
Zillur	1	23	No formal education	Construction labour	Tenant	3	23	Khulna	With contacts
Zakir	3	28	No formal education	Decorator work, Rickshaw puller	Tenant	4	17	Kishorganj	With contacts
Bapin	4	28	No formal education	Fish business, Mason	Tenant	4	5	Bhola	With contacts
Abdul	4	56	Secondary school or above	Firewood, Garbage collecting business, Tree cutting,	Owner	4	25	Bhola	With contacts
Hashmot	4	43	No formal education	Rickshaw puller	Tenant	4	7	Narayanganj	Without contacts
Dolon	8	30	Class five to Secondary school	General labour (House shifting), Waste picking	Tenant	5	15	Barguna	With contacts
Shamsul	9	48	No formal education	Local leader, construction business	Owner	4	18	Bhola	With contacts
Babla	7	35	Class five to Secondary school	Driver (private car)	Tenant	4	18	Bhola	With contacts
Saiful	4	40	No formal education	Unemployed	Tenant	1	6	Barishal	With contacts
Kholil	4	35	No formal education	Construction work	Owner	4	3	Bhola	With contacts
Foysal	9	36	No formal education	Brick breaking, Waste picking	Tenant	4	18	Chitagong	With contacts
Aziz	4	32	No formal education	General labour (loading & unloading), Rickshaw Puller	Tenant	5	31	Bhola	With contacts
Fokrul	10	45	No formal education	Mason, building house, breaking house	Owner	4	22	Barishal	Without contacts